

WIN A £1000 SPANISH BATTLEFIELD TOUR

MILITARY ILLUSTRATED

£2.80 July 1994 Number 74

Warrior Monks

Storming of Dargai

Boer War Steam Engines

Burgundian Warrior





July 1994 Number 74 ISSN 0268-8328

Military Illustrated

Past & Present

Front cover

Japanese warrior monk in action, by Kuniyoshi, master of the warrior print. (Japan Archive)



Back cover

Various types of the French Forces of the Interior during the rising in Paris, late August 1944. Plate by P.A. Leroux from notes he took during the fighting. (Private Collection)

Published monthly by
Publishing News Ltd.
Editor: Tim Newark
43 Museum Street,
London WC1A 1LY
071 404 0304

Advertising:
Ignacio de Murtinho-Braga
43 Museum Street,
London WC1A 1LY
071 404 0304

Typesetting:
PRS Ltd, 2 Avro Court,
Lancaster Way,
Ermine Business Park,
Cambridgeshire PE18 6XS
0480 414347

Printing: The Grange Press,
Butts Road, Southwick,
West Sussex BN4 4EJ

UK newsagent distribution:
United Magazines
Distribution Ltd.
1 Benwell Rd., London N7 7AX
071 700 4600

Subscription service:
Military Illustrated
17 Bushby Avenue,
Rustington,
W. Sussex BN16 2BY
0903 775121.

Publisher's subscription rates
for 12 issues (one year):
UK, £35; other European,
£50; by Airspeed - USA,
\$100; other non-European,
£60; all payments in sterling
or US dollars.

Military Illustrated Past &
Present is published monthly
by Publishing News Ltd.
The subscription price is \$100
for one year. Mercury
Airfreight International Ltd.,
2323 E-F Randolph Avenue,
Avenel, NJ 07001 (US Mailing
Agent). Second class postage
paid at Rahway, NJ, USA.

| | | |
|----|----------------------|--|
| 6 | Letters | Spanish Battlefield tour competition |
| 7 | Review | Videos |
| 8 | Review | Books |
| 10 | World War Two | French Forces of the Interior French Resistance units, 1940-44 René Chartrand |
| 14 | Re-enactors | Celts and Romans Philipp J. C. Elliot-Wright |
| 16 | Japanese Warfare | Warrior Monks Medieval monastic battles Stephen Turnbull |
| 20 | British Army | Storming of Dargai Pathan Revolt, 1897-98 Michael Barthorp |
| 25 | Medieval Warfare | Burgundian Warrior in the East Mamluk costume, 1432-33 David Nicolle |
| 28 | British Army | Steam Sappers Steam Engines in the Boer War David Fletcher |
| 31 | World War Two | A Tank in Every Village Ardennes Battlefield tour Rod Hopkirk |
| 34 | Military Art | My War In Sketches Ray Newell |
| 36 | Weapons | Roman Archery Tested Duncan Massey |
| 39 | Military Diary | List of Military Events |
| 40 | Military Illustrated | Archive Comprehensive listings of previous articles |
| 42 | Review | Auctions |

Sharpe's Nock

I was interested to read the comments made by Richard Moore (MI 71) concerning the replica Nock volley carbine that is to be featured in the forthcoming Sharpe films.

The Nock volley carbine is perhaps the most bizarre military weapon ever to be issued to Crown forces in large quantities. Its genesis was in 1779 when a certain James Wilson appeared before the Board of Ordnance with "a new invented gun with seven barrels to fire at one time". Wilson's idea was by no means original as multi-barrelled guns had been in existence since firearms were first invented. The authorities considered that it might be useful for the Navy to fire from the fighting tops of warships and Henry Nock (later to be Gunmaker-in-Ordinary to George III) was commissioned to make two prototypes.

Amazingly enough, these were to be rifled and the rates of issue for each class of ship were decided upon with 74 guns ships upwards receiving 20 guns, down to sloops which were to have eight. Eventually, the Board of Ordnance decided that the guns should be smooth bored and Nock managed to under-bid his rivals for the contract to supply 500 of them at the staggering price of

£13 each. It should be borne in mind that the common musket of the time cost about £1.15s.6d.

These original guns weighed some 12lb and used balls of 46½ to the lb. There appears to be some debate as to the actual bore diameter, with Howard Blackmore giving .460" and DeWitt Bailey .520", (as stated by Richard Moore). As surviving specimens are very rare, I have been unable to verify either estimation of calibre.

Mr Moore's observations concerning the necessity of varying the powder charges during the filming reflect the experience of those who worked with the guns in the 18th Century. It was found that the original charge of 2½ drams of rifle powder caused excessive recoil and eventually led to a substitution of 1½ drams of common musket powder.

Nock was to make 655 of these guns in total which cost the Board of Ordnance the princely sum of £8,519. They were only issued on a few occasions, the most notable of these being to Howe's fleet for the relief of Gibraltar in 1782 and to HMS Pandora when she searched for the mutineers from HMS Bounty in the South Seas during 1791. Many naval commanders (Nelson included) disliked their use aloft, considering that their massive

muzzle flash risked setting the sails alight.

Despite their rejection by the navy, civilian versions of Nocks's guns achieved a brief period of popularity as sporting weapons, especially for shooting flocks of geese on mud flats.

In 1805, their inventor James Wilson (then a Captain of Marines) suggested that the Nock guns should be issued to the Sea Fencibles only to be told that they had been "long considered obsolete".

It is hardly surprising that the Nock volley gun had such a short and undistinguished career. It was not only very expensive to make but was cumbersome and took a long time to reload. As to its alleged recoil, having personally fired a sporting version with a charge of heavy shot, I cannot recommend the experience to anyone.

Bill Harriman,

Clwyd

D-Day Competition Winners

The winners of MI's D-Day competition are: 1st prize, David Williams; 2nd prizes, David Thomas, K. Steadman; runners-up prizes, D J Wayman, Robin Bird, Andre de Beugny, Gordon Risebrow, Timothy E. Warner. They have all been informed by post.

Spanish Battlefield competition

MIDAS BATTLEFIELD TOURS, specialists in pre-20th century battlefield tours, have reserved a place on their 'Over the Hills and Far Away' tour for the winner of the Military Illustrated Peninsular War competition. This exciting 8 day tour, which retails at £1099, follows Wellington's battles in the Pyrenees and the invasion of France from 1813 to 1814. The tour departs on September 17th 1994 and returns on September 24th 1994.

The tour will visit the battlefields of Vittoria, Sorauren, Maya, Roncesvalles, Vera, the Nivelle, Nive, Orthes and Tarbes. The towns of San Sebastian, Burgos, St Jean de Luz and Bayonne are also visited, whilst a highlight of the tour is a trip by cogwheel railway to the top of the spectacular 2,500 feet high mountain, La Rhune, from the top of which Wellington worked out his strategy for the battle of the Nivelle. A visit to the international museum of Hussars at Tarbes is also included.

The tour provides shared half board

accommodation in 3 and 4 star hotels and is accompanied by author Ian Fletcher, whose *FIELDS OF FIRE* (just published by SPELLMOUNT at £35) is offered as a second prize to the two runners-up.

To enter the competition, answer the three multiple-choice questions below this month and a further three in next month's MI, and send your answers on a postcard or the back of a sealed envelope together with your name and address and a daytime telephone number to: Peninsular War Competition, Military Illustrated, 43 Museum Street, London WC1A 1LY. Overseas readers should use airmail postage. Your answers should arrive no later than August 19th 1994. The sender of the first correct entry drawn from all the entries received by this date will win the tour, the next two correct entries drawn will receive the runners-up prizes. The competition is open to all readers except employees of Military Illustrated and their immediate relatives. The editor's decision

on all entries is final and no correspondence can be entered into. The correct answers will be published in the September 1994 issue of MI. Winners will be notified.

This month's questions:

1. Name the ship which brought Wellington to the Peninsula in April 1809.
 - a) Crocodile
 - b) Surveillante
 - c) Nymph
2. Name the French commander at the battle of Roliça
 - a) Junot
 - b) Delaborde
 - c) Victor
3. To which regiment of the British Army is the battle honour 'Arroyo Dos Molinos' unique?
 - a) 50th (West Kent) Foot
 - b) 28th (North Gloucestershire) Foot
 - c) 34th (Cumberland) Foot



Still from the German feature film *Stalingrad*.

The Yellow Star (Chronos: E)
The Liberation of Auschwitz
 (Chronos: E)
The Liberation of Majdanek
 (Chronos: E)

Chronos Films was founded in Berlin in 1961 by Bengt von zur Muhlen as a documentary film archive concerning modern German history. Chronos have now released three of their own productions under the generic title Holocaust. Dieter Hildebrandt's *The Yellow Star/Der Gelbe Stern* (1980) tells the story in eighty-five minutes of the persecution of the Jews from 1933 to 1945, and is based on the book of the same title by Gerhard Schoenberger. It begins by explaining how the Nazis achieved absolute power and instituted a campaign of hate against the Jews. Many artists and intellectuals undergo a self-imposed exile, but by 1935 only one in seven of German Jews had left. New laws forbade interracial marriage and stripped Jews of citizenship. The assassination of a German diplomat in Paris by a Polish Jew provided Hitler with the excuse to launch a pogrom which included the infamous Kristallnacht. Increasing numbers of Jews apply for asylum abroad, but the numbers are limited by bureaucracy and apathy. The population are turned against the Jews by the use of exhibitions, films and speeches.

The film includes film of the Warsaw and Cracow ghettos and the only known film, shot in Holland, of the deportation process. There are extracts from the notorious fake Nazi documentary *The Fuhreer Presents a City to the Jews*, filmed at Theresienstadt, made, but never shown, to placate world opinion. The images of Auschwitz and other concentration camps, although

familiar, retain their shocking power. The narration is supplemented with quotes from survivors. The film fails to supply an adequate explanation for the genesis of the Final Solution, attributed far too simplistically to Hitler's psychosexual neuroses. It was nominated for an Academy Award and features a new introduction by dedicated Nazi-hunter Simon Weisenthal.

The last two are both directed by Irmgard von zur Muhlen, Bengt's wife and collaborator. *The Liberation of Auschwitz* (1986) is a record of film shot by Soviet cameramen between January 27th and February 28th 1945. Captain Alexander Vorontsov recalls the appalling conditions encountered by the liberators. The film was shot silent, and has no added sound effects, but has an English commentary. Some of the original film was used as evidence in the Nuremberg trials.

The Liberation of Majdanek (aka *Majdanek* 1944) (1987) consists of film shot at the notorious camp near Lublin, Poland between July and December 1944. It is unique in that Majdanek was still in operation at the time of its liberation. While most of the victims were Jews, there was a high proportion of Russian and Polish prisoners. The film includes interviews with survivors shot on sound film by

famous Soviet cameraman and director Roman Karmen. There is film of SS Officers and Kapos confronted by their erstwhile victims in what was one of the first war crimes trials, carried out while the war was still in progress.

Stalingrad (Entertainment: 15)

The crucial Second World War battle at Stalingrad has been the subject of many films made within the Russian film industry, but has all but been ignored by its German counterpart. German film makers have evidently felt intimidated by the thought of tackling a subject which became a national trauma. Of the 285,000 predominately German and Austrian troops who were surrounded there, 146,000 were killed and 91,000 were captured. Only 6,000 were to return home some years after the war.

Stalingrad (1992) was originally conceived by Dr. Gunther Rohrbach, the head of Bavaria Films who produced Wolfgang Petersen's classic U-boat film *The Boat/Das Boot* (1981), to appear both in a cinema and television mini-series form. Director Joseph Vilsmaier was initially reluctant to take on such a controversial subject, but was eventually won over by the challenge. A decision was made to release only a feature length version.

The film was shot mainly in Czechoslovakia, although some scenes were made in Finland, when the Czech thaw set in before completion of the winter sequences. The actors' frosty breaths testifies to the fact that much of the film was shot in sub-zero temperatures. A considerable amount of authentic period uniforms, arms and equipment were utilised, including World War II vintage T-34s and OT-810s, the Czech built version of the SdKfz half-track.

Little is seen of the High Command, Field Marshal von Paulus is represented by a fictional General Hentz (Martin Benrath). Poor characterisation among the leading players, who become increasingly indistinguishable as they wrap themselves in clothing to keep out the freezing cold, diminishes both audience identification and the emotional impact of the film. The film veers dangerously towards cliché when the Germans capture a female soldier (played by Dana Vavrova, the director's wife) and a teenage boy. However, several sequences stay in the mind: the assault on the factory district, the use of flame-throwers in the sewers, the execution of Russian prisoners, an attack by T-34s on entrenched infantry, and the panic at Pitomnik airfield as the last plane flies out. Stephen J. Greenhill

Small Arms Pistols and Rifles

by I. Hogg, ISBN 1-85367-175-5, 154 x 213mm (landscape), 160 pages, 76 mono photographs, 76 line drawings, published by Greenhill Books, 1 Russell Gardens, London NW11 9NN, price £12.95.

To the person faced with the wish to acquaint him or herself with a basic overview of current small arms, the problem is quite daunting. Faced with purchasing books ranging from the coffee table editions written by the Enid Blyton's of the gun world, to the very expensive technical volumes that go far beyond the average student's needs, this book fills this gap at an affordable price, providing the reader with a selection of data on modern small arms.

Whilst no two persons will agree on the selection of weapons covered, I do find Mr Hogg's choice surprising. Only one revolver, and the Smith & Wesson .44 Magnum at that! To the best of my knowledge it has no significant use with either the military or police. Surely, a Smith & Wesson .357 and .38 revolvers should have been included, similarly the omission of the Ruger revolvers is quite astonishing. With the rifles, no mention is made of the M14 and the L1A1, yet the M1 carbine is included, together with weapons which have yet to achieve significant acceptance.

Each double page is devoted to one weapon with a brief informative text, a good photographic illustration and a line drawing by Ray Hutchins. A useful book at a reasonable price to add to your library on modern small arms.
Max Sarche

Backbone of the Wehrmacht

by R Law, revised edition, ISBN 0-88935-139-2, mono illustrations throughout. Collector Grade

Publications, Canada, distributed in U.K. by SPA Books Limited, P.O. Box 47, Stevenage, Herts SG2 8UH, price £49.50.

Readers of *Military Illustrated* must be aware of the widespread use of the Mauser rifle. This book deals in great detail with the K98k rifle from 1934-1945. It provides the reader with an insight into the development and manufacture as well as its procurement by the military (even the German postal service).

Commencing with the upgrading of earlier models to new specifications, it details its production, the contractors and the military acceptance procedures. Also covered are the many varied markings and the multitude of accessories that were developed for the K98k, these include ammunition pouches, bayonets, grenade launchers, training aids and sights.

There is a section on contract rifles for the Chinese, Japanese, Portuguese and the Swedes. A fascinating book, not only on the K98k, but providing the reader with insight into the manufacture and military acceptance and markings of a military rifle. High recommended.
MS

Forman's Guide to the Third Reich German Awards and Their Values

2nd Edition, Published by Bender, USA, 1994, 288pp. Hardbound. Price £32.95 (948 photos).

All collectors of Third Reich memorabilia will be familiar with the name Adrian Forman, an internationally respected dealer and authority in this field. For this, the second edition of his 'Guide', he has been fortunate in acquiring the photographic

archives of the late Dr. K.G. Klietmann to whose memory the book is, deservedly, dedicated. The result is a superbly illustrated work featuring 'life size' photographs which, in almost all instances, show the reverse as well as the obverse of each item. Also included are several photos of the pieces actually being worn. Of such, surely the most interesting is that which shows the sometimes questioned 'Danzig Flak Badge' being worn on Luftwaffe uniform. Other rare illustrations include authentic examples of all three grades of the Sniper's badge (so frequently pictured only in its 'approved' 1952 version)

Issue cases (or packets) are illustrated but not citations which are to form the subject of a future Forman study. Cloth versions of naval and Luftwaffe war badges are included (less here on those of the army). The awards of the Free City of Danzig are also covered. A particularly interesting section is that devoted to the awards of the NSDAP. Controversy may be generated by the authority's observations on the Gau Essen badge, but this is a field which calls for further research. Makers' variants are touched upon, but, of necessity, only partly explored. This would hardly be practical in a single volume considering some badges have more than a dozen recorded maker variants!

It is difficult to comment on the valuations — these are in US dollars. Some may strike readers as unduly low. As the author himself points out in his introduction, value is determined more by collector interest than rarity and may fluctuate. It is, as he freely acknowledges, 'only a guide'.

Available from Adrian Forman, PO Box 25, Minehead, Somerset TA24 8YX, price

£32.95 plus £2.50 postage and packing.
David Littlejohn

Battle Tactics of the Western Front

by Paddy Griffith. Yale University press; ISBN 0-300-05910-8; 304 pp, maps and tables; bibliography and index; £20.00.

World War One is famous as the war in which a generation of young men emerged out of trenches at the orders of generals who had no understanding of modern warfare and were subsequently mown down by machine guns and artillery. We are horror-struck by the idiocy and lack of military art and yet this is a clichéd view of the fighting which may have been true at the beginning of the war but after much experience on the Western Front, tactics and technology were quickly improved to adapt to the new form of warfare. This is Paddy Griffith's contention.

No stranger to controversy, Griffiths blows apart this myth of the First World War and argues that by 1916 the British had mastered the art of 'storm-troop tactics' and by perfecting the timing and orchestration of all-arms assaults, predicted artillery fire, commando-style trench raiding, the use of light machine guns or the barrage fire of heavy machine guns, the British were far ahead of the Germans in their understanding of the new warfare. The generals, he maintains, may not have been geniuses, but they oversaw a rapid growth of new tactics and arms which adapted to the Western Front rather than ignored it. A fascinating argument well researched and documented and a good read too. Highly recommended.

DISASTER AT D-DAY

THE GERMANS DEFEAT THE ALLIES, JUNE 1944

by Peter Tsouras

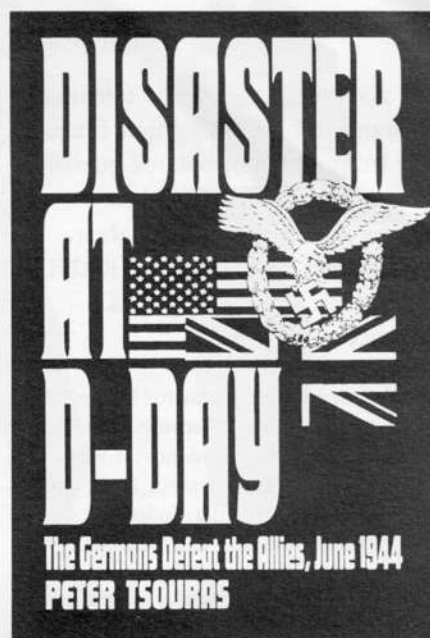
NEW BOOKS
FROM GREENHILL

June 1944: the Allies have prepared the largest forces ever gathered for the massive, decisive invasion of Europe. Facing them on the coast of France is the might of the German Wehrmacht. What happens next is well known to any student of modern history – but the outcome could have been very different, as Peter Tsouras shows in this convincing new account of the D-Day campaign.

The question of 'what might have been' has fascinated authors as diverse as Saki and Len Deighton, dealing with the fictional after-effects of great battles. *Disaster at D-Day*, firmly based on fact, is a brilliant study of how a campaign could lead to unexpected results. Peter Tsouras introduces minor alterations at the start of the operation – the slight repositioning of a unit, the unlooked-for presence of a commander – and examines their effects as they gather momentum and impact upon all subsequent events. Without deviating from the genuine possibilities of the situation, he presents a campaign that keeps the reader guessing and changes the course of history.

- The 'alternative' D-Day campaign
- Fast-paced, gripping narrative
- Maps, tables and illustrations

Peter Tsouras is an analyst at the US Army's Intelligence and Threat Center in Washington DC, specialising in twentieth-century European history and its interpretation. He is the author of *The Great Patriotic War*, also published by Greenhill Books.



240 x 159mm. 240 pages with
16 pages of halftones; maps.
ISBN 1-85367-160-6. £17.95.

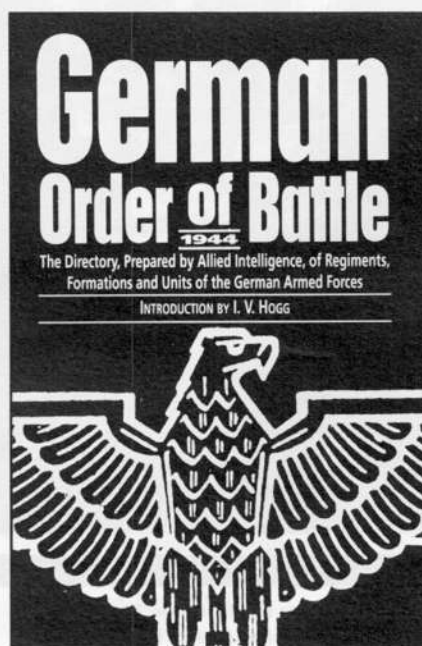
GERMAN ORDER OF BATTLE, 1944

War Office, UK
New Introduction by I.V. Hogg

German Order of Battle, 1944 represents everything the Allies knew about the strength of their adversaries at this key time – the point of invasion. It was used by the British Army throughout World War Two, constantly being updated by the continuous process of compiling a complete picture of the enemy forces. In order to make accurate plans it was essential to know as much as possible about the composition, equipment and location of every sub-unit and specialist formation, and this edition contains the information used by Allied commanders as they prepared to take the offensive into Europe.

Also included are details of organisation of the German armed forces, brief divisional and unit histories and biographical notes about most of the senior German officers. This additional information enabled a good assessment

of the efficiency and capability of the various units to be made.



German Order of Battle, 1944 is not only a valuable reference work but also a fascinating historical document for the military enthusiast.

- All known data of German armed forces by 1944
- Used by Allied commanders for the D-Day invasion
- Background information on German officers and their units

Ian V. Hogg served in the Korean War and is the most famous modern writer on military small arms. He is the author of many books, including *Military Small Arms of the Twentieth Century*, and editor of *Jane's Infantry Weapons*.

222 x 141mm. 480 pages.
ISBN 1-85367-170-3. £15.95.

French Forces of the Interior

French Resistance units, 1940-44

D-Day was the signal for the uprising of resistance forces throughout France, but far from all being isolated guerrilla units, many had been trained as battalions and even possessed their own uniforms. RENÉ CHARTRAND describes their organisation and appearance.

If 1944 was an important year for Britain, the United States and Canada because of their allied armies landed in Normandy, it was an even more crucial year for France itself, and its armed forces in particular. Indeed, it was the year of the rebirth of a truly national French army, four years after its terrible

defeat. In the intervening years, however, there grew inside France a number of guerrilla groups, usually nicknamed the 'maquis', which practiced sabotage against the German occupation forces. Their origin can be roughly said to begin shortly after General Charles De Gaulle's 1940 call to continue fighting as Free French. The various *maquis* groups within France became known as the F.F.I. for *Forces Françaises de l'Intérieur* — French Forces of the Interior. The wartime and post-war cinema has usually left the French *maquis* with an image of isolated spies or small urban guerrilla patriots invariably guided by handsome British or American officers parachuted in to provide them with guidance and expertise.

In fact, the F.F.I. included incredibly varied sorts of groups, going from isolated guerrillas in cell-like secret units dear to cinema directors to the much lesser publicized battalion-sized covert organizations. The small units were generally in the northern area of France, occupied from the outset by the Germany Army. The larger covert organizations tended to be in the southern part which was run by the 'Vichy French' government. In 1940, after the defeat of the French Army, General Petain had signed an Armistice with Germany and, for a time, set up a pro-German government headed by Pierre Laval at Vichy. This area was not occupied by the Germans until 1942.

Of these larger covert organizations, the



Members of the F.F.I. in Boulogne, 14 September 1944. They wear civilian dress with tricolour

horizontal armbands for distinction. The young woman is their leader, and wears the rank insignia

of lieutenant on her left cuff. (National Archives of Canada, PA 166396.)



Uniforms of the young men of the *Chantiers de la jeunesse*, 1942-1944. From left to right, a member wearing the brown leather jacket and the forest green cape for walking out dress, a trumpeter with

the forest green working dress jacket (the white aigillettes, gloves, puttees and belts are added for ceremonials), a member in summer working dress wearing a light grey shirt and forest green tie, and

a guard of the colours in ceremonial dress armed with an axe. Plate by Daniel Lordey. (By permission of *La Sabretache*.)

most important was certainly the *Chantiers de la jeunesse* — the Youth's Work Camps. First set up in southern France and French North Africa towards the end of 1940, the *Chantiers* incorporated young Frenchmen, who would have normally done their obligatory military service, into various battalion-style *Groupes* units for public works. The *Chantiers* were run as paramilitary organizations with their own rank structure, uniforms, flags and badges. They were of course not armed but provided a considerable amount of military-style training which seemed to include everything except the handling of weapons. In this way, it was secretly hoped by its leaders that some of the French youth would acquire some military capacity for a future struggle, in spite of not having had any military service. The *Chantiers* also proved essential in providing wilderness survival training for the *maquisards* in the countryside, while secreting away as many supplies as possible.

From 1940 to the end of 1943, some 400,000 young Frenchmen served in the *Chantiers de la jeunesse*. The pro-Nazi Vichy French officials viewed them with some suspicion but, from 1942, the Germans themselves kept an increasingly vigilant eye

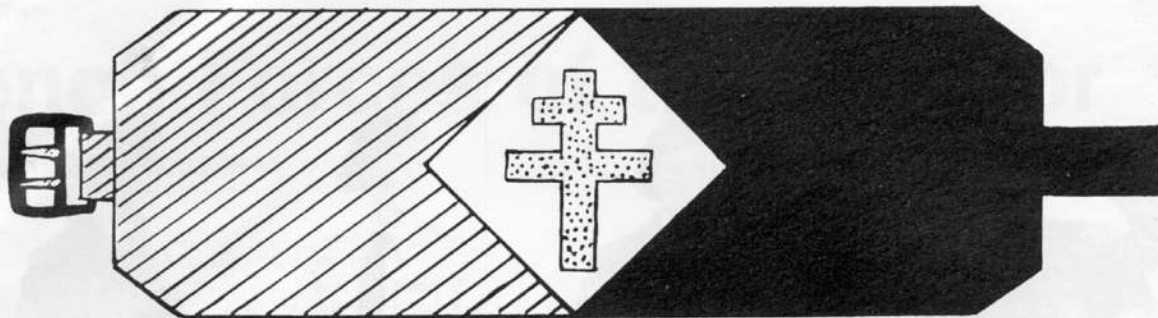
on the *Chantiers* as their troops occupied southern France. There seemed to be many things suspicious about this curious assembly of overgrown 'Boy Scouts'. In September 1943, the Germans — smelling foul play — demanded that the *Chantiers* be all transferred to Germany as part of the 'Service du Travail Obligatoire' (Obligatory Work Programme), a demand that was flatly refused by the *Chantier's* Commissary General — in effect the commanding general — La Porte du Theil in stormy meetings with German officials. The exasperated Germans finally resorted to 'other ways' and, on 4 January 1944, the Gestapo arrested and took away La Porte du Theil. But opposition to such a move was so rampant by then that many youths and leaders (officers) took to the hills of southern France. Meanwhile, the structure of the *Chantiers* was reorganized into a 'green' sector and a 'blue' sector to industrial workers — the colours reflecting the hues of the men's work clothes. But all was amiss in the upper echelons after the arrest of La Porte du Theil, the pro-Nazi Vichy government appointing no less than three successive commissioners between January and June 1944.

With the landing in Normandy, and

especially the one in Provence, the *Chantiers* dissolved as about 40,000 joined Free French Army units. Indeed, one of these units, the 7th Chasseurs d'Afrique was entirely formed by members of the Algerian *Chantiers* and commemorates their heritage in the French Army. In French North Africa, the *Chantiers* had prospered with few constraints and some 40,000 were incorporated to Algerian and Tunisian troops.

There were also veteran's associations of the paramilitary *Chantiers* and also of some disbanded French Army regiments at the time of the occupation. An outstanding example was the veteran's association of the 6th Battalion of Alpine Chasseurs formed in 1942 which, in fact, was the reorganization of the battalion in the secret army. In the summer of 1944, the battalion emerged out of nowhere in Chasseur uniform, fought and lost over 400 men before liberating Grenoble on August 22nd.

In the four years since June 1940, the French opposed to the German occupants and their Vichy puppets caused a considerable amount of trouble but also paid a heavy toll. Some 60,000 were executed. Another 200,000 were deported to Germany from where only about 50,000 came back;



70,000 people were interned; 35,000 civil servants and 15,000 officers were dismissed, all for being 'suspect'. Material conditions in France were becoming desperate, especially in cities. Vast amounts of all sorts of supplies being diverted to the Axis. For example, of the three million cars and trucks in the country in 1940, there remained only about 300,000 four years later.

Thus, when the allies landed in Normandy, on June 6th, and in Provence, on August 15th, the French Forces of the Interior suddenly came out of everywhere. The many who had been quietly preparing for years the fight for the Liberation, such as the *Chantiers*, were now joined by a multitude of others. A multitude of units with exotic names suddenly appeared: the 'Corps franc des Pyrénées', the 'Brigade Alsace-Lorraine', the 'Artillerie du Puy-de-Dôme', and even the F.F.I. 'Garde mobile de Vichy'. By the end of August 1944, it was estimated that the F.F.I. numbered about 400,000. According to General Eisenhower, the F.F.I. 'had been of inestimable value in the campaign. They were particularly active in Brittany, but on every portion of the front in a multitude of ways. Without their great assistance the liberation of France and the defeat of the enemy in western Europe would have consumed a much longer time and meant greater losses to ourselves'. But the F.F.I. paid heavily for the part it played in the liberation of France. The number of men and women killed in action or executed up to the end of September 1944 has been estimated at 24,000.

One of the most dramatic episodes concerned the liberation of Paris. In mid-August, the Germans still held the city but, as the allied armies were approaching, the resistance decided on an uprising. On August 19th, fighting broke out and soon spread to various parts of the city. Eisenhower's plan was to surround the city and force the surrender of the garrison 'to avoid making Paris a battleground' but the uprising now made it 'necessary to move rapidly to their (the F.F.I.'s) support'. General Leclerc's 2nd French Armoured Division was sent to the rescue, and received the surrender of the German general commanding the Paris garrison on August 25th.

As September 1944 came, the government

of General De Gaulle now had to cope with a situation which could get out of hand.

Already, many F.F.I.'s were taking the law into their own hands and taking revenge on those who had collaborated with the Germans. In Bordeaux, some *maquis* leaders even had to be threatened with jail by De Gaulle before they rallied. Authority had to be restored or anarchy might follow. On September 19th, the government announced that the F.F.I. would be integrated into the French Army. The time for guerrillas and *maquis* had come to pass; what France now needed was a large army to finish the struggle against Nazi Germany. During the fall of 1944, some 300,000 were enlisted into the army contributing to the rebirth of one of

history's great armies.

The F.F.I. did not have, of course, official uniforms. By and large, the *maquis* wore their own civilian clothes consisting of garments suitable for outdoor activities with bits and pieces of military equipment, such as the French 'Adrian' steel helmets. There were, however, uniforms of sorts among some of the covert groups in southern France.

The *Chantiers de la jeunesse* did have a uniform which consisted of a forest green beret, a brown leather jacket with four brass buttons in front, a pair of forest green golf-style baggy trousers, a pair of forest green puttees, a forest green cape with removable hood, a medium grey shirt with a green tie, a



A lieutenant (left) and a soldier (right) of the F.F.I. at Caen on 10 July 1944. Photo by Ken Bell.

(National Archives of Canada, PA 132547.)

Opposite

F.F.I. armband made in Algiers and parachuted in the area of Perpignan, in southern France. It was made of blue material on the left with a red Cross of Lorraine on a white lozenge at the centre and was red on the right.

pair of brown shoes and brown leather belts. A forest green jacket with four buttons was worn for work duties. There were many types of unit and rank badges and officers also had their types of uniform. The naval groups of the *Chantiers* had the blue sailor's uniforms with blue berets. Many joined the *maquis* wearing elements of these uniforms.

Veterans' associations might also have uniforms. One of the most striking examples was the association of the 6th Battalion of Alpine Chasseurs. It wore dark blue berets, jackets and puttees, grey-blue baggy trousers and hooded overcoat, yellow piping on trousers, yellow bugle badges and numbers, brass buttons and black leather belts. They wore this dress fighting in August 1944 and later campaigning in the Alps.

Some members of the F.F.I. secreted old army jackets or equipment in their closets. The sports style dark blue beret, short jacket and trousers appeared to find much favour. Berets, no doubt because they were typically French, were worn by most if they could not secure a French steel helmet. Some helmets had the letters 'FFI' roughly painted in white on the front.

During the uprising in Paris, some F.F.I. groups were seen in relative uniformity. Those which took over the Denfer-Rochereau Station had the French helmet, some with FFI painted in white, brown leather jackets or old French Army coats and even captured German Army boots. On D'Assas street, the resistance fighters wore the French Army helmet or forage cap, the army jacket and many had light tan shorts. Near the Sorbonne University, they wore dark blue. These types were noted by P.-A. Leroux who made a colour plate published in small numbers shortly thereafter. This exceptional document is republished with this article.

However, no matter what they wore, nearly all F.F.I.'s in France wore armbands on the upper left sleeve. The variety of these was considerable. During the Paris uprising, the most common armband seen was simply three horizontal bands of red, white and blue cloth hastily stitched together but it was by no means the only one. Another popular type featured a small French tricolour on white. Still others had lozenges in red and blue with a red Cross of Lorraine on the white centre. Some 'government' F.F.I.'s had blue-white-blue vertical bands with a red Cross of Lorraine on the white part. Many types of armbands were also made in England or Algiers and parachuted into



A young woman of the French resistance, armed with a French Army rifle, possibly the 8 mm. M.1907/15, and wearing bandoleers of rounds,

photographed in Rouen during July 1944 by Ken Bell of the Canadian Army Photo Unit. (National Archives of Canada, PA 115865.)

occupied France.

Weapons, like the clothes, varied enormously. Britons and North Americans often have the impression that most of them were parachuted from England by the O.S.S. Indeed the numbers of weapons and ammunition airdropped into France from January to October 1944 seem impressive: nearly 17,000 rifles, mostly 30-calibre US, M1's; 2,400 Thomson Submachine-guns; nearly 16,000 45-calibre M1911 automatic pistols; 3,600 rocket launchers, about 7 million ammunition rounds. Even added to the many arms previously airdropped by the British and those parachuted into southern France from Algiers, these numbers would only arm a fraction of the F.F.I. Most were armed with old French army rifles, often of pre-World War One vintage. In cities, hiding weapons was more difficult but captured German weapons were eagerly sought. In Paris, some had French Army rifles and equipment but most resistance fighters carried captured German Mauser rifles and Luger pistols and wore German equipment. Many also had gotten hold of the German 'Potato Masher' grenades, some patriots attacking German troop trucks and even Tiger tanks with them!

In spite of their shortages of clothing, arms and equipment, the French Forces of the Interior always tried to compensate and put on a military bearing. 'It was touching to see them', recalled General De Gaulle of a parade in Lyon, 'despite their disparate appearance, make efforts to take on the appearance of regular troops'. At Toulouse, he saw 'their improvised flags and pennants... the efforts they had made to give a uniform appearance to their clothes, and above all, the bearing, the look, the tears of the men who paraded before me...' The F.F.I. had now outlived its usefulness and passed into history ●

Sources:

Charles De Gaulle, *Mémoires de guerre. Le salut, 1944-1946*, Plon, Paris, 1959; Marcel Vigneras, *Rearming the French*, (United States Army in World War II series, Special Studies), Washington, 1957; Dwight D. Eisenhower, *Crusade in Europe: a Personal Account of World War II*, New York, 1948; 'Les Chantiers de la jeunesse', *Carnet de la Sabretache*, special issue 1990; P.-A. Leroux, 'La libération de Paris, août 1944', *Le Passepoil*, 1945.



Celts and Romans

The earliest period of British history so far re-enacted is that of the Celts and the Roman invaders. PHILIPP J.C. ELLIOT-WRIGHT describes these very specialised groups.

Some twenty-two years ago, in 1972, one of today's most respected historical groups, The Ermine Street Guard, was formed with the objective of bringing to life in every detail the Roman soldier of the first century A.D. With the initial assistance of H. Russell Robinson who shared his extensive knowledge from his experimental reconstructions, the Guard committed itself from the very beginning to make by hand in the original materials exact copies of equipment from surviving pieces and other evidence such as Trajan's column. Today the forty odd members of the Guard are recognised by professional archaeologists as a valuable form of experimental archaeology and the Guard prides itself on being able to make every single item of arms, armour, clothes and foot-wear from within its own ranks to museum standard. For example, its detailed reconstruction of a catapult not only impresses the public at displays with its ability to shoot bolts into targets, but it also answers the question of actual range and accuracy.

Over the years other similar groups have come into existence, not necessarily as direct copies of the Guard, but to develop alternative elements of the Roman army's long occupation of Britain. Formed some three and a half years ago, Legio 11 Augusta is in its fourth season of events and fields some 14 legionaries, who, like the Guard, stage drill displays and various elements of a Roman soldier's military life. As well, Legio has some eight female members, known under the title 'Domina' who recreate for the public the non-military side of Roman life, religion, medicine, cooking, spinning and weaving, cosmetics and the herbs and plants of the period.

Legio's armour is copied from items found in the Corbridge Horde, the 'lorica

segmentata' (flexible segmental armour), plumed 'galea' (iron helmets) and other items being copied in every working detail. It is in this exhaustive detail that the high costs and dedication of Roman groups are most obvious. A single legionnaire's segmentata can cost up to £1,500 with the full soldier's uniform and equipment costing over £3,000. This has two major consequences. Firstly a member must become addicted to cleaning. The arms and armour require constant attention, and it can take up to a full working day to clean all items of equipment after a single display. The second consequence is that these groups do not participate in physical combat. Even a single sword or spear blow could irreparably damage an item which can cost hundreds if not a thousand pounds to replace.

It would be unfair and inaccurate to suggest that the Celtic, or Iron Age groups as they prefer to be termed, are any less dedicated to accuracy and detail, but it is undeniable that they are motivated by a different spirit. One of the leading groups, Brigantia, was formed in 1990 and has some twenty-two members. Representing British Celts from the 1st century B.C. up to the Roman Claudian Invasion of 43 A.D. they participate in some eight to nine events each year, two or three alongside various of the Roman groups. For those wishing to see the two sides engage in combat though, disappointment would be the order of the day as there are some fundamental and very understandable reasons why they cannot. The very impressive Roman legionary

armour and equipment can come to a total price tag of £3,000 and with the very best will in the world, a single blow from an Iron Age Celtic spear or sword would require several hundred pounds to repair! This factor is becoming a more general limitation in other historical periods as well. As the quality and hence cost of reproduction items rises so that many participants are wearing over one thousand pounds worth or more of equipment and cloths, then the ability to engage in anything but carefully staged and choreographed combat disappears. For members of Brigantia, there is great attention to detail, with some of the warriors' elaborate torcs costing over £100, swords over £160 and great care taken to ensure the complex woad body patterns are as authentic to contemporary body painting as the limited historical record permits.

For those interested in seeing these groups, both participate in various events particularly at Caerleon (City of the Legion) in South Wales for CADW where there is The Roman Legionary Museum (for details: 0633-423134). For particular events, Brigantia and Legio 11 Augusta will be at Corbridge Roman Town, Northumberland over August Bank Holiday (for details: 0434-632349), while the Ermine Street Guard and Brigantia will be at Porchester Castle, Hampshire over the weekend of 1st-2nd October (for details: 0705-378291).

For information on the various groups:-

Brigantia — 0329-842055.

The Ermine Street Guard — 045-2862235.

Legio 11 Augusta — 0705-790617 ●



Opposite

Brigantia — Iron Age Britons — re-enactment group.

Right

Re-enactors of Legio 11 Augusta. (English Heritage Special Events Unit).

Warrior Monks

Medieval monastic battles

Battles between samurai and warlords are a familiar aspect of Japanese history, but from the 11th to the 16th centuries, there was a third force in Japanese military politics. STEPHEN TURNBULL, charts the rise to power of the militant Buddhist temples and their warrior monks.

The warrior monks have their origins in the rapid growth to power of the major Buddhist institutions in central Japan, which were centred around the capital city of Kyoto and the former capital of Nara, which lies about thirty miles away to the south. The Kyoto centres were the temples of Enryaku-ji and Miidera. Enryaku-ji was built on top of, and

Miidera at the foot of the massive forested mountain complex called Mount Hiei, or Hieizan, which lies to the north-east of Kyoto on the shores of Lake Biwa. It was founded by the monk Saicho (767-862), who is known by the posthumous name of Dengyo Daishi. Mount Hiei had been deliberately chosen as a monastic site because according to the laws of Chinese geomancy, the north-east was the direction from which evil could strike the capital, so the building of a monastery was seen as a defence against evil spirits. At its height the Mount Hiei complex consisted of over 3,000 religious buildings. Miidera was Enryaku-ji's daughter temple. There had been immediate jealousy from the older foundations of Nara when Mount Hiei was established, as they

saw their historic pre-eminence threatened by these new institutions. The Nara temples were the Kofuku-ji and the Todai-ji. Both still exist after much rebuilding, and the Great Buddha Hall of the Todai-ji is the world's largest wooden building.

These great monastic centres were associated with the Tendai sect of Japanese Buddhism, and the rivalry between the two groups was not about religious doctrine as such, but more to do with wealth and prestige. In fact the earliest records of rivalry are between factions of monks in the same area, and such disputes in 968 for Nara and 981 for Hiei, were conducted internally over the choice of new Abbots. In the same year of 981 we also read of the first demonstration by warrior monks in the streets of Kyoto,



Mounted warrior monk charges into battle. He is wearing a monk's cowl over his armour (Japan Archive)



Warrior monk using naginata (Japan Archive)

when they marched through the capital to place their demands in front of a terrified Court. For the next hundred years their incursions alarmed the superstitious courtiers, and frightened the ordinary citizens of Kyoto.

It is possible that by the twelfth century the warrior monks constituted the most formidable standing army in central Japan. It is questionable, however, whether those who suffered their violence were more frightened by the monks themselves or the spiritual power they represented. In any case the monks must have been an intimidating sight. The *sohei* represented in scroll paintings or later woodblock printed books always look very rough characters.

Monk weapons included the usual sword



Warrior monk uproots a tree. Note the shaven head and headband (Japan Archive)

and dagger as worn by samurai, bows and arrows, and often the monk's traditional weapon called a *naginata*, a form of glaive. The blade was similar to a sword blade, but often much wider, and was fixed on a polearm handle between three and seven feet long. In the eleventh and twelfth centuries the form called the *shobuzukuri naginata* was preferred, which had the shorter handle and a huge blade. Slashing strokes were the usual way of fighting, and could produce very nasty wounds. A quick stroke upwards towards the unprotected groin was a favourite manoeuvre, and a monk on horseback would stand up in his stirrups and whirl the *naginata* about him. There is a famous account of a warrior monk who

fought during the first Battle of Uji in 1180. The planks of the bridge over the River Uji had been removed as a defence, but the nimble *sohei* climbed on to the beams of the bridge, and whirled his *naginata* like a propellor, deflecting the arrows that were fired at him. This act earned him the nickname of 'Tajima the Arrow Cutter'.

The other weapon the monks carried was the fear of the gods they represented. Every monk carried the Buddhist form of 'rosary beads', and would readily pronounce a curse upon anyone who offended him. The Imperial Court was particularly vulnerable to such treatment, as their lives were conducted according to strict religious and astrological rules, and Mount Hiei was their



Warrior monks of Mount Hiei carrying the *omikoshi* of the Mountain King into battle (Japan Archive)

spiritual guardian. Often the monks would reinforce their presence by carrying down the sacred *omikoshi*. *Omikoshi* are very elaborate portable shrines, and may be seen today whenever there is a shrine festival in Japan. They are associated with the Shinto religion rather than Buddhism, but in the time of the warrior monks Shinto and Buddhism were closely related, and when the monk Saicho had founded the Mount Hiei temples in 788 he had dedicated them to the Shinto god (or *kami*) called Sanno, the 'King of the Mountain' who was already worshipped there. Sanno's shrine was the Hiyoshi Shrine at the foot of Mount Hiei, and when the monks headed for the capital they would call in at the Hiyoshi Shrine and collect the *omikoshi*, into which would be ritually transferred the spirit of Sanno. The *omikoshi* was carried on poles by about twenty monks, exactly as festival shrines are transported nowadays, and any assault on the *omikoshi* was regarded as an offence to Sanno himself. The *Heike Monogatari*, the great epic of the twelfth century wars, describes several such incidents, including one that resulted from the murder of a Mount Hiei monk by a courtier. The shrine of the Mountain King was taken down to Kyoto, and the monks chanted the six hundred volumes of the *Dai Hannya Kyo* as a curse. Sometimes the *omikoshi* would be left in the streets while the monks returned to the mountain. Here it would remain, to the dread of all the citizens, until the monks' desires were satisfied. This subtle form of blackmail was first used in 1082.

It did not take the temples long to realise that their *sohei* could also be useful in disputes between various temples and sub-

divisions of temples. It is important to realise that these squabbles were not religious wars as we know them, but they were just as fierce and ruthless, and the issue was frequently settled by burning down a few of the opposing temple's buildings. Alliances were regularly formed, and as easily broken. Enryaku-ji and Miidera maintained deep rivalry and jealousy of each other, and were always ready to fight. We hear of them united against the Kofuku-ji of Nara in 1081, when Kofuku-ji burned Miidera and carried off much loot. Later in the same year Enryaku-ji burned its own branch temple of Miidera over a succession dispute. In 1113 Enryaku-ji burned the Kiyomizu-dera in Kyoto over a rival appointment of an Abbot, and in 1140 attacked Miidera again! However, 'The Mountain' would always rally around which one of its branch temples was attacked. Such an incident is described in the *Heike Monogatari*. In 1117 the Governor of Kaga province was a certain Fujiwara Morotaka, whose brother Morotsune acted as his Deputy or *mokudai*. According to the chronicles the Deputy came across a group of monks bathing. He drove them away and bathed in their stead, washing his horse in the same clear water. The monks were very angry at this, and started a fight with the Deputy's retainers. As a punishment the Deputy burned down their temple, which happened to be a distant branch of the Enryaku-ji. The mother temple rallied to the cause of her wronged infant, and three thousand monks descended on the capital to demand the banishment or imprisonment of the two brothers. The frightened courtiers speedily agreed to banish the Deputy, and the *Heike Monogatari* quotes

the sad words of the Ex-Emperor Go-Shirakawa In, which have passed into history:

'There are three things which are beyond my control: the rapids on the Kamo river, the dice at gambling, and the monks of the mountain.'

But the defiant *sohei* were not satisfied, and demanded banishment for both. They returned with the *omikoshi* of the Mountain King, and 'as they entered *Ichijo* (a street in Kyoto) from the eastern side, people wondered if the sun and moon had not fallen from heaven'. They marched through the city to the Imperial Palace, where they found an armed guard of samurai and footsoldiers barring their way. The monks attacked, and in the confusion several arrows struck the *omikoshi*. The monks were so furious at this act of sacrilege that they left the *omikoshi* where it was and returned to the Mountain, only returning after further conflicts and fights, and an agreement to banish the wrongdoer.

The incident had however shown that the monks could be faced down, and in 1146 a young samurai called Taira Kiyomori had his first dramatic clash with the *sohei*. On the day of the Gion Festival in Kyoto one of Kiyomori's attendants quarrelled with a priest from the Gion shrine. Vowing revenge Kiyomori led an attack on the Gion shrine while their own *omikoshi* was being paraded. With a haughty samurai disregard for religious scruples Kiyomori himself deliberately shot an arrow at the *omikoshi*, which struck the gong on the front, and proclaimed the act of sacrilege far and near. Enraged at this offence to an *omikoshi*, seven thousand warrior monks from Mount Hiei descended on the capital, baying for Kiyomori's blood. But by now the Imperial Court had become dependent upon samurai armies such as those of Kiyomori's Taira clan for defending them against monastic incursions, and exonerated Kiyomori on payment of a nominal fine.

From about 1180 onwards the activities of the warrior monks became submerged beneath the chaos of the Gempei civil war, in which Taira Kiyomori was one of the chief protagonists. His rivals, the Minamoto clan, had acquired the services of a pretender to the throne, a certain Prince Mochihito, who raised a rebellion against the Taira in 1180. The reaction was swift, and Prince Mochihito fled to the temple of Miidera and its monk armies. Miidera sent out appeals for help to Enryaku-ji and the temples of Kyoto, but in spite of the incident of 1146 Kiyomori managed to ensure the Enryaku-ji's neutrality by a handsome bribe. The Kofuku-ji of Nara was also not inclined to help its northern rivals, and left Miidera alone to face the Taira army. This led to the Battle of Uji, and the incident described briefly above, but in spite of the bravery shown by monks fighting across broken bridges the rebellion

failed, and the monks of Miidera were not allowed to forget their unfortunate alliance. Taira Tomomori, one of Kiyomori's sons, led the attack on Miidera. About a thousand monks made a shield barrier, and held out for twenty four hours, as shown in a woodblock printed edition of the *Heike Monogatari*. Here the monks are charging into battle, carrying various weapons, and with headcows or shaven heads. Taira Tomomori finally broke through and set the temple on fire.

Much worse was in store for the temples of Nara. Kiyomori had sent envoys to negotiate an alliance with the Taira clan, but the monks assaulted the messengers and forcibly shaved their heads, then added insult to injury by making a wooden head which they called the head of Kiyomori, and played football with it in the temple courtyard.

through, so the fateful order was given to use that most deadly of weapons in the samurai armoury: fire. It is probably that Shigehira only intended to burn down a few isolated buildings to break the monks' defensive line, as rival temples had done to each other for two centuries, but a particularly strong wind was blowing.

In all 3,500 people died in the burning of Nara, and only the Imperial Repository of the Shoso-In remains to this day. The heads of 1,000 monks who were killed were displayed in Nara or carried back to Kyoto. The punishment of Nara was noted on Mount Hiei, and when in 1183 the Minamoto leader Kiso Yoshinaka entered Enryaku-ji the monks sheltered him for a while, but took no part in his military campaigns. For the rest of the Gempei War Mount Hiei was subdued, and when the

Nobunaga's general Toyotomi Hideyoshi. Realising that the monk armies were a potential threat to his rear, Nobunaga, with characteristic ruthlessness, decided to burn down the entire temple complex as a precaution. He explained his argument thus:

'I am not the destroyer of this monastery. The destroyer is the monastery itself. If they are not destroyed now they will become a peril to the nation.'

The assault began on September 29th 1571. Nobunaga first burned the town of Sakamoto, at the foot of Mount Hiei, but most of the townspeople had taken refuge on the mountain. He took particular care to destroy the Hiyoshi shrine of the Mountain King, and then his 30,000 men were deployed in a vast ring around the mountain, and began to move steadily upwards at the sound of a conch trumpet, burning and shooting all



Monks of the Dalju-ji in Okazaki help Tokugawa Ieyasu defeat the Mikawa Ikko-ikki. (Japan Archive)

Kiyomori still behaved with caution, and sent a force of five hundred men with orders to use no violence unless absolutely necessary. The deputation was attacked by the monks, sixty samurai were killed, and their heads displayed around the pool of Sarusawa opposite the southern gate of the Kofuku-ji. Furious at the reaction, Kiyomori immediately sent his son Shigehira with orders to subdue the whole city of Nara. When the monks heard of his approach they made ready to defend their temples and the city. Ditches were dug and palisades erected, and from these flimsy barricades they faced the Taira army.

Shigehira's mounted samurai bowmen were held off until dark by the determined monks. No cavalry charge could break

Minamoto finally triumphed Nara was restored to its former glory.

It was to be almost two hundred years before monk armies again became a force to be reckoned with in Japanese politics, and Nara was never again to feel the clash of battle. Instead the focus shifted back to Mount Hiei, but its Tendai monks did not take much part in fighting until the sixteenth century, though Mount Hiei played some part in the 'Wars Between the Courts' of the fourteenth century. But during the fierce 'Age of War' Mount Hiei began to display much of its old vigour. During the campaigns of Oda Nobunaga in 1570 Mount Hiei had provided sanctuary and support for two of his enemies, the Asai and Asakura families, until its monk army was defeated in battle by

that stood in their way. By nightfall the main temple of Enryaku-ji had gone up in flames, and many monks unable to resist had leapt into the fire. Next day Nobunaga sent his gunners out on a hunt for any who had escaped. The final casualty list probably topped 20,000, and was the end of the long history of the warrior monks of the Tendai sect temples of Mount Hiei and Nara. Never again would there be monk armies from the Mountain, but there was already a new threat to the samurai peace from a different direction. This was from the populist Amidist sects of the Ikko-ikki ●

Storming of Dargai

Pathan Revolt, 1897-98

Nearly a hundred years ago British and Indian troops fought an action against tribesmen on the North-West Frontier which so caught the imagination of the British press and public that it was celebrated with re-enactments in the music halls. It also witnessed the awards of four Victoria Crosses, the greatest number for a single action since Rorke's Drift. MICHAEL BARTHORP recounts the action.

The North-West Frontier tribes had always been troublesome. Since 1849 when the British first came into contact with them after annexing the Punjab, there had been no less than 39 expeditions of varying size and duration against them, but the trouble had been localised. The Pathan Revolt, which lasted from June 1897 to April 1898, involved all the major Frontier tribes — Wazirs, Afridis, Orakzais, Swatis and Mohmands — as well as minor ones, with one important exception, the formidable Mahsuds who had been chastened in 1894 and were biding their time for another day. It was spread over a mountainous region about 200 miles in length from south to north, roughly the size of Scotland.

The cause of this generalised outbreak was due to tribal fears for the loss of their independence, resulting from the demarcation of the boundary between British India and Afghanistan following the agreement made between the two in 1893. These fears made fruitful soil for the outpourings of agitators and fanatical mullahs, calling for a 'jihad' to capitalise upon alleged British reverses elsewhere in the world, inflicted not only by Islamic peoples but by European powers as well. This coincided with a change in traditional tribal tactics brought about, on one hand, by the increased range and rate of fire afforded to the British, but not yet Indian, infantry by the magazine rifle, and, on the other, the acquisition of more modern rifles than their old 'jizails' by the tribesmen themselves through gunrunners, by theft and by manufacturing copies in their own arsenals; these gave them parity of firepower with the Indian battalions. Magazine rifles rendered the Pathans' old, massed rushes with edged weapons far more vulnerable than they had been to single-shot weapons, even breach-

loaders. Furthermore the tribesmen quickly appreciated the casualties they could inflict by long-range firing from the relative safety of their rocky heights, where their natural agility and speed outweighed that of most regular troops, whose mobility was always limited by the need to protect headquarters, guns and the logistic baggage train that accompanied any force venturing into the hills. Opportunities for sudden eruptions with sword and knife in dangerous defiles would still present themselves but generally, by the late 1890s, the tribesman had become more a rifleman than a swordsman.

Had the tribes' uprisings been better coordinated, the Revolt would have been even more difficult to suppress. Even so the operations to quell it involved the deployment of five main Field Forces, of Tochi, Malakand, Buner, Mohmand and, the largest of all, of Tirah, as well as other bodies of troops. The largest tribal concentration was the combined Afridis and Orakzais, who could muster up to 50,000 fighting men and inhabited the central region of the operational area, south of the Khyber Pass, which they attacked on 23 August and controlled for four months. It was to strike at them that the Tirah Field Force was assembled under Lieutenant-General Sir William Lockhart and began its march on 11 October. It consisted of two

infantry divisions, each of two four-battalion brigades, with divisional troops. This main striking force was backed up by three reserve, all-arms formations, plus lines of communications troops. The entire force totalled 34,506 all ranks (64% of them Indian Army) with nearly 20,000 non-combatants. The four brigades of the main column each had two British battalions, one Indian and one Gurkha. Lockhart's plan was to invade the Afridis' and Orakzais' summer home, the Tirah Maidan, a wide region running east-west, bounded on the north by the Safed Koh range and on the south by the Samana range; the whole area had never before been penetrated by British forces. He planned to do this from the south, via the Sampagha and Arhanga Passes, but to reach these he would have to force the Chagru Kotai on the Samana Range. Overlooking the Kotai, a mile and a quarter away and a thousand feet above it, was a precipitous ridge along which the enemy, alerted to the advance, had already constructed sangars' around the village of Dargai.

Lockhart had advanced with his 2nd Division leading, the 1st Division being some 16 miles in the rear. On 18 October he ordered 2nd Division to dislodge the enemy (Orakzais) from the Dargai position to clear the way for the advance northwards. At 4 a.m. Kempster's 3rd Brigade left the advanced base at Shinauri, some five miles south of Dargai, to make an encircling move to the west so as to turn the enemy's right flank. An hour later Westminster's 4th Brigade advanced and by 9.20 its two mountain batteries were engaging Dargai from the Chagru Kotai. Covered by their fire, the infantry began their steep and difficult ascent with the 1/3rd Gurkha Rifles leading, the 2nd King's Own Scottish Borders in support, and the 1st Northamptonshire Regiment in reserve. In places the route was so steep that the men could only advance in single file and before long they came under fire from the enemy riflemen above them, but still they pressed on upwards. At 12 noon the leading Gurkhas reached a flat, exposed terrace, about 80-100 yards across, beyond which a track climbed steeply for nearly another 300 yards to the crestline. Covered by the KOSB's rifle fire, the Gurkhas rushed across and, though losing men, stormed up the final slope with the Borders close behind. Seeing the kukris and bayonets close upon them, and by now





Tribesmen of the North-West Frontier armed with antique weapons. At Dargai, many possessed more modern rifles

aware of Kempster's approach on their right, the Orakzais abandoned their positions and made off down the reverse slopes of the ridge. The attack had cost the 1/3rd Gurkhas thirteen casualties and the KOSB six.

Kempster's men came up just before 2 p.m., but were too late to do more than speed the retreating enemy on their way with rifle-fire. This brigade — 1st Gordon Highlanders, 1st Dorset Regiment, 15th Sikhs and 1/2nd Goorkha Rifles — had had a trying day due to the difficulties of their route. So impracticable had this proved that the accompanying mountain battery had been forced to return to Shinauri under escort.

A decision was now made that was to have serious repercussions later. Although the enemy had been cleared from Dargai, it was decided not to hold it. The 1st Division was still too far off to take over what the 2nd had won. There was no practicable water supply close to Dargai. To hold Dargai and guard the approaches from Shinauri would not only over-extend the 2nd Division, but could also compromise Lockhart's choice of possible lines of advance after his whole force was concentrated. The 2nd Division was therefore ordered to return to Shinauri.

After destroying Dargai's defences and burning the village, Westmacott's 4th Brigade went first, while the 3rd Brigade, with two

KOSB companies, covered the retirement, supported by the batteries still on the Chagru Kotal. As the sun began to set, just before 5 p.m., Kempster's battalions started to thin out. Unfortunately the sound of the earlier action had attracted Afridis to the Orakzais' aid and men of both tribes, numbered in several thousands, were soon pressing Kempster's rearguard, the 15th Sikhs. These fell back through the Gordons and KOSB companies, who then retired covered by the last two Gordon companies. They had a stiff fight getting clear, and all suffered casualties, but once past Chagru Kotal they were unmolested. They eventually reached Shinauri at 11 p.m., having been under arms for 19 hours, marching some 25 miles and climbing 4,000 feet.

The next day there was some difference of opinion between Lockhart and Major-General Yeatman-Biggs, commanding 2nd Division, about how best to proceed, during which the enemy, contrary to expectations, re-occupied the Dargai heights in strength. Lockhart decided to reinforce Yeatman-Biggs with the 2nd Derbyshire Regiment, 3rd Sikhs and two batteries from the 1st Division, so that, on 20

Overleaf

All British and Indian Army troops wore khaki drill of varying cut according to regiment, Scottish battalions having kilts or trews. All British ranks wore foreign service helmets which, though broadly similar, varied in minor details of shape between units and between officers and men. Quilted neck curtains were issued at the start of the campaign, but were not worn at Dargai by KOSB and Gordons. All infantry had the Slade-Wallace equipment, the Indian Army having its own version. The Gordons had the 1894 pattern pouches, the KOSB and Dorsets the 1888 type. The British water-bottle issued in India was square-shaped, the Indian circular. Officers suspended their revolvers and swords, or kukris, from Sam Browne belts with single or double braces.

British infantry had the .303-in. Lee-Enfield magazine rifle, Indians and Gurkhas the .45-in. Martini-Henry. British and Indian mountain gunners were armed with the mountain artillery sword.

Left page

From top left, clockwise: Gunner, Royal Artillery Mountain Battery; Officer, 2nd King's Own Scottish Borderers; Gurkha Officer, 1/2nd Goorkha Rifles; Private, 2nd King's Own Scottish Borderers; Rifleman, 1/3rd Gurkha Rifles.

Right page

From top left, clockwise: Lt-Col. H.H. Mathias, 1st Gordon Highlanders; Sepoy, 3rd Sikhs; Piper, 1st Gordon Highlanders; Corporal, 1st Gordon Highlanders; Private, 1st Dorset Regiment.

Painting by Douglas N. Anderson.





October, he could contain the enemy on the heights, whilst the rest of the force advanced by another defile to the east to threaten the enemy rear. Yeatman-Biggs, however, decided use of this defile, without first capturing the heights, was unsafe, so ordered an assault thereon from Chagru Kotal, using the same route as on the 18th. Thus the work was all to be done again, but now the enemy, of both tribes, were in far greater strength than before.

This time the assault was to be made by Kempster's 3rd Brigade with the two 1st Division battalions attached. At 8 a.m. the 1/2nd Goorkhas began the approach, preceded by scouts of the 1/3rd Gurkhas and supported by the Dorsets with the Derbys in reserve. Initially the Gordons were to cover the attack with long-range rifle-fire and the 3rd Sikhs provided close protection for the three mountain batteries. The 4th Brigade formed a protective rearguard less the Northhamptons who, with a mountain battery, were positioned about a mile to the east, ready to co-operate from that direction with long-range fire and to guard the route from Shinauri.

At 10 a.m. the guns opened fire but with less effect than anticipated, owing to the protection afforded the tribesmen by the rocks and clefts on the heights. The 1/2nd attacked vigorously upwards but, on reaching the terrace where the 1/3rd had suffered on the 18th, they entered a murderous fire zone. Although some got across to shelter, it proved impossible to cross without severe loss.

The Dorsets came up, charged, but could do no better. Here the first of the Dargai VCs was won, by Private Vickery who ran to rescue a wounded comrade under a heavy fire. The next went to Lieutenant Pennell of the Derbys, for twice trying to save his captain who had fallen, only to find that he was dead. Against some 12,000 tribesmen, mostly armed with Martini-Henrys and Sniders, pouring down a cross-fire at relatively short ranges, nothing, it seemed, could cross that death-trap. On the far side, in cover from the crest, lay the few who had reached it, but not one of these battalions had been able to get across in sufficient strength for the final climb up to the crest.

Just before 3 p.m. as the enemy, now confident of success, beat their drums and flourished their standards in defiance, Yeatman-Biggs ordered up the Gordons and the 3rd Sikhs. The 1st Gordons were a seasoned battalion in Frontier warfare. Not only had they been in action on the 18th, but had gone through the Chitral Expedition two years before. Their colonel, H.H. Mathias, had been in the Nile Campaign, 1884-85. The 3rd Sikhs, with much service in the Punjab Frontier Force, were no strangers to hill fighting. With the Highlanders leading, these two battalions marched up, past the dispiriting sight of wounded descending, until they were level with the other three and

halted, as those were, under cover.

The guns opened up with three minutes' concentrated bombardment, then Lieutenant-Colonel Mathias addressed his men: 'Highlanders! The General says the positions must be taken at all costs. The Gordons will take it!'⁵ The bugles sounded, the pipers struck up, the officers ran out to give a lead, and the forward companies raced through the fire across the open space where so many had fallen.

Major Macbean, on his colonel's right, fell almost immediately, shot through the groin, but continued to cheer the men on. Lieutenant Lamont and two Highlanders were killed outright. Others fell wounded, including four other officers. Lieutenant Dingwall was hit four times but Private Lawson, a Northumbrian, ran to his aid and carried him to cover. Having done so, he ran back into the fire and, though twice hit himself, brought the wounded Private Macmillan to safety. Piper Findlater was shot through both ankles but dragged himself to a rock and continued to play the regimental march, 'Cock o' the North', to encourage his comrades despite the heavy fire falling around him.

The other battalions had tried to cross the terrace with company rushes or in small parties. The Gordons charged as a whole battalion. Close behind them were the 3rd Sikhs and, as the Gordons began to clamber up the final steep ascent, the remains of the 1/2 Goorkhas, Dorsets and Derbys all rose to their feet to follow the Gordons' lead.

The tribesmen's fire had been continuous but, realising this attack was not to be denied and never seeing advantage in holding out to the last, they began to abandon the heights. As the cheering Gordons gained the crest, they saw their enemies making off and opened fire to speed their flight. Their breathless Colonel, who had a slight wound to his foot, remarked to a colour-sergeant: 'Stiff climb, eh, Mackie? Not quite — so young — as I was — you know'. 'Never mind, sir', replied the NCO, slapping his Colonel on the back, 'Ye're gaun werra strong for an auld man!'⁵

The Gordons cheered Mathias, the other regiments cheered the Gordons, and Dargai was won, but at a cost, to the whole force, of 195 casualties of which 37 were killed. The Gurkhas suffered most with 18 killed and 49 wounded, followed by the Dorsets with 9 and 40. The Gordons lost only three killed, including one officer, but had 41 wounded, of which four later died and six were officers.

As every schoolboy, indeed the whole nation, once knew, Piper Findlater was awarded the Victoria Cross. Later, after being decorated by Queen Victoria in Netley Hospital, he became briefly one of the most celebrated men in the kingdom, receiving offers of marriage and starring at the Royal Tournament and the Alhambra Theatre. Private Lawson also received the Cross, though his gallantry, like that of Pennell and

Vickery, never caught the public's imagination as the piper's did.

Few other late 19th Century military actions had such effect upon poets and versifiers, writers and journalists, artists and illustrators. Their works were mostly commercially-inspired, so Dargai came as something of a gift to them. The Gordons' attack was undoubtedly a fine feat of arms, but it must be questionable whether it would have received such coverage had, say, the Dorsets, or even the Gurkhas, made the final charge. Highlanders were always popular with the general public. In more discriminating circles a more balanced view prevailed. Lord Wolseley, the Commander-in-Chief, though quick to congratulate the Gordons by telegram, nevertheless deprecated Findlater's stage appearances as contrary to the Army's traditions. When Colonel Mathias' stirring exhortation was reported in the press, a notice appeared in the cloakroom of a famous London club, frequented by Army officers: 'Do not leave your umbrella here — the Gordons will take it!'

At least seven of the leading military artists painted the Gordons' attack and two of their efforts were hung in the Royal Academy.⁶ The storming of Dargai by no means ended the campaign; when Pathans ran away, they did so to fight another day. But it inflicted serious casualties upon them and its moral effect deterred them from again risking such a major action. Tactically it secured the flank of Lockhart's advance towards the Sampagha and Arhanga Passes which, when forced, led into the Tirah proper. Once established therein, further operations were mounted to bring the Afridis and Orakzais to heel ●

1. Including cavalry squadrons (4), mountain batteries (6), Maxim detachment, second-line battalions (2), pioneers, sappers, hospitals.
2. Kotal = summit of a pass.
3. Stone-built breastworks.
4. The fourth battalion, 36th Sikhs, was not present this day.
5. Quoted Gardyne, Hutchinson, James (see sources).
6. Peter Harrington, 'British Artists and War, 1700-1914' (1933), pp.255-263.

Sources:

- Callwell, Col. C.E., 'Small Wars' (1906).
 Gardyne, Lt-Col. C. Greenhill, 'The Life of a Regiment: History of the Gordon Highlanders' Vol. II (1903).
 Hutchinson, Col. H. D. 'The Campaign in Tirah, 1897-98' (1898).
 James, Lionel, 'The Indian Frontier War' (1098).
 Nevill, Capt. H. L., 'North-West Frontier, 1849-1908' (1912, reprinted 1992).
 Woollcombe, Robert, 'All the Blue Bonnets: History of the KOSB' (1980).
 Periodicals: 'Black and White'; 'The Graphic'; 'Illustrated London News' (all 1897-98).

Burgundian Warrior in the East

Mamluk Costume 1432-33

Bertrandon de la Broquière was a spy for the Duke of Burgundy, gathering military information at the heart of the Islamic Empire. DR. DAVID NICOLLE traces his journey and the disguise he wore.

In July 1433 a French nobleman arrived at the village of Potherées and presented himself before his lord, Duke Philip the Good of Burgundy, to report on a mission he had just completed. Such events were commonplace and the man himself, Bertrandon de la Broquière, had no great claim to fame. Yet his arrival at the Ducal Court still caused a stir. Not only was he dressed as a Middle Eastern Mamluk warrior and rode the horse he bought in Syria, but Bertrandon de la Broquière's remarkable voyage took him through Egypt and Syria, the rapidly expanding Ottoman Empire of Turkey and the Balkans, the tottering remnants of the Byzantine Empire in what is now Istanbul, as well as Serbia and Hungary. Yet even this voyage was far from unique in the 15th century when many pilgrims, merchants and ambassadors trod the same paths. What made Bertrandon special was his extraordinary powers of observation, his almost photographic memory and his ability to make friends among peoples who were generally seen as Christendom's deadliest foes. His experiences were recorded in his *Voyage d'Outremer*, a book packed with information about everything from Arabian horse-harness to Turkish underwear. Unfortunately nothing survives of the 'Saracen' clothing which Bertrandon wore and then gave to Duke Philip the Good, nor of the translation of the Muslim Holy Book, the *Qur'an*, which he presented to the Duke.

Bertrandon de la Broquière was not Burgundian by birth but came from Guyenne in the opposite corner of France. This had been under the English Crown for centuries. England and Burgundy had also been allies throughout much of the Hundred Years War, so perhaps this was why Bertrandon entered Burgundian service. In 1421 Bertrandon became one of the Duke of Burgundy's *Écuyer Tranchant* or senior squires; the following year he was included in a diplomatic mission. In 1423 he was sent on another 'embassy' to the Count of Foix and the Spanish Kingdom of Navarre. He must have done well because in 1425 Bertrandon de la Broquière was promoted to Premier *Écuyer*

Tranchant. Three years later Duke Philip the Good sold him the castle, village and surrounding lands of Vielzchastel or Vielchâtel — now called Vieux Château in the Department of Cote d'Or. Some time later Bertrandon was also recorded as seigneur of Arquennes, as well as being the Duke's councillor and chamberlain. A bundle of documents in the Dijon Archives dated 1429-30 includes a damaged seal which might have been Bertrandon's. It shows a coat-of-arms with the first and fourth quarters 'checky' or 'lozengy' with a wolf or rampant fox in the second and third quarters, though its colours are unknown. One thing is clear, however, Bertrandon de la Broquière was a highly experienced diplomat, traveller and soldier by the time he went on his famous journey across the Middle East in 1432-3.

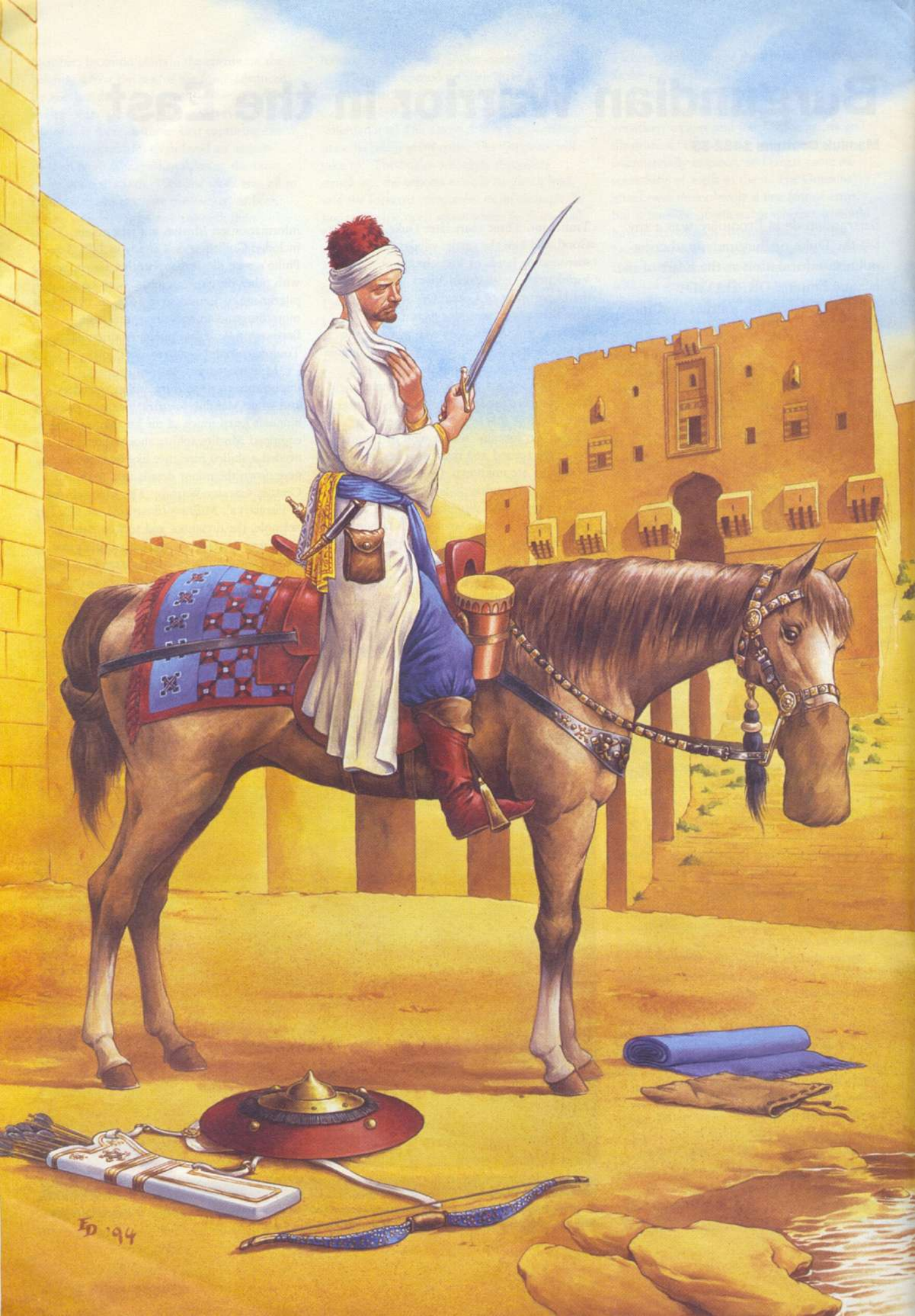
Bertrandon's master, Duke Philip of Burgundy, was born in 1396, the year of a disastrous Crusade organized by his grandfather and led by his father. This hugely expensive enterprise had been crushed by the Ottoman Turks at the battle of Nicopolis, yet young Philip grew up in a court still dominated by Crusader dreams of destroying Islam and conquering the Holy Land. At the age of five he dressed up as a Turk and played at 'Crusades'. After becoming Duke, Philip sent several travellers east to get up-to-date

information on Muslim military power. They included Guillebert de Lannoy in 1421-3 and Philip's own illegitimate brother Guyot who, with other Burgundian lords, went on a pilgrimage to Jerusalem in 1425. In 1432 three more Burgundian noblemen were sent — Bertrandon de la Broquière, Andrieu de Toulangeon and Geoffroy de Thoisy.

Military matters were of primary importance to these Burgundian travellers and while Mamluk *Furusiyyah* cavalry training manuals listed much of the kit that a properly equipped Muslim soldier should carry, it needed a skilled foreigner like Bertrandon to note down the minor details (see '14th Century Cavalry Warfare: The Mamluk Art of Furusiyya', *Military Illustrated* no. 60). For example, the fireworks and rockets used in Damascus to celebrate the return of a great Pilgrim Caravan from Mecca were also used against enemy shipping at sea. The weapons and costume of Syrian 'Arabs' — probably meaning low-ranking provincial Mamluk troops — included robes with huge sleeves a foot and a half wide and much longer than their arms. Each warrior carried a spearshaft of hazel or other wood, as thin as a European lance near its tip but with small iron blades at each end. One blade had a cutting edge while the other was a spiked butt. Each man also had a small round shield with a large spiked



Bertrandon de la Broquière presents a translation of the *Qur'an* to Duke Philip the Good of Burgundy during the siege of Mussy l'Évêque, in Bertrandon's *Voyage d'Outremer*.



boss surrounded by a silk fringe. Their hats were round and tall, of brushed dark red wool — the *zami* of Arabic sources — often with small turbans drooping down each side of the head. Mamluk garrison infantry in Damascus who protected the Pilgrim Caravan were armed with swords; some also having crossbows, others hand-guns. Compared with such rudimentary equipment, the Mamluk Sultan's own elite units back in Cairo wore full iron armour covered in coloured silk, plus helmets, shields, spears, swords and complete archery equipment. Horse-armour, though known, does not seem to have been particularly popular among the Mamluks but velvet-covered saddles decorated with gold or silver and inset with semi-precious stones were used by those who could afford them.

Even more detailed information resulted from Bertrandon's need to look like a Mamluk so that he could join a merchant caravan homeward from Damascus across northern Syria and Turkey. Following the advice of his Mamluk guide and friend Muhammad, Bertrandon de la Broquière got a complete set of local clothing, from underwear to a water-proof felt cape plus appropriate weaponry. He also bought a 'tabolzan (tablzine: Persian & Arabic for saddle-drum) to put on the horn of my saddle' as used by anyone of rank, plus a 'little leather stick to beat the drum'. He also got hold of some spurs and 'knee-high red-boots as is the custom of the country', a 'bonnet' to go under his headdress, little silk kerchiefs 'in the Turcoman manner', some Turkish spoons, a sharpening stone, some knives, a comb and case, a leather container for drinking-water, all of which were conveniently attached to his sword-belt.

Opposite

Ed Dovey's reconstruction shows the Burgundian Bertrandon de la Broquière clad as a Mamluk warrior in order to join a merchant caravan on his journey home from Damascus. As he said in his book, he bought 'Two ankle-lengths white robes, a whole-cloth head-dress, a cloth girdle, a pair of fustian trousers to tuck my shirt into, a little carpet for sleeping, a sack to put my things in, another sack to hang on my horse's head so he could eat his oats and hay. I had a cloak made of white silk covered with poplin which was very useful during the nights. Then I went to buy a very nicely decorated, all-white quiver. I also bought a sword and some knives to hang on it, as well as a spoon and a leather salt-bag, after their fashion. I had to buy the sword and quiver secretly for, if the police had found out, those who had sold them to me and I would both have been in danger. The swords of Damascus are said to be the finest and most beautiful in Syria. They have a strange way of burnishing the swords, for, before tempering, they use a piece of iron set in a wooden handle to remove the roughness along the blade, just as you would use a plane on wood. They then temper them and polish them so that they could be used as a mirror when they want to adjust their headgear. They cut better than any other swords I have seen.'

Finally Bertrandon purchased what he called a 'capinet' or small cape of very light white waterproofed felt and a decorated shield so that he did not damage his own 'very fine' one which was kept with the rest of his luggage on a baggage-camel; also some thumb-guards for archery.

During Bertrandon's long journey to the Turkish frontier in the Taurus mountains his young Mamluk friend taught him how to shoot on horseback with such 'rings and thumb-guards'. This suggests that Bertrandon not only used a thumb-ring for his right hand, as had been done by Middle Eastern archers for over a thousand years, but also a *siper* for shooting short arrows. This Turkish device replaced the earlier *majra* or arrow-guide as used by Saladin's horse-archers against the Crusaders. Later, when the Burgundian travellers reached Bursa, Bertrandon had to buy a tall red hat and a 'military insignia of brass wire' so that he could travel safely across the rapidly expanding Ottoman Empire. On the way he went via Constantinople (Istanbul) which was virtually all that remained of the once mighty Byzantine Empire.

Once safely back in Burgundy, Bertrandon de la Broquière's career continued to flourish. He was made warden of Marcigny-les-Nonnains in 1434 and, a year later, châtelain of both Châteauneuf and Sante-Marie-le-Bois.

In the meanwhile, Philip the Good of Burgundy did more than merely send observers to the Middle East, although the results of his efforts to fight the Turks were little better than acts of piracy. Using information brought back by Bertrandon de la Broquière and other Burgundian travellers, Philip built a fleet in Flanders under the technical supervision of Portuguese shipwrights. These ships then sailed to the Mediterranean to help the Knights Hospitaller of Rhodes who were already under attack by Mamluk forces from Egypt. By 1442 four Burgundian ships under the command of one of Bertrandon's travelling companions, Geoffroy de Thoisy, were operating from Rhodes. Together with some galleys hired from Venice, the Burgundians then tried to sever Ottoman communications between Europe and Asia across the Dardanelles in 1444. Meanwhile Duke Philip the Good and his 'old friend' Pope Pius II plotted, planned and negotiated in the dwindling hope of stimulating a Europe-wide Crusade. It was all in vain, for troubles at home meant that even those rulers who wanted to march eastward were unable to do so. Then on 29th May 1453 the great blow struck: Constantinople fell to the Ottomans and the Byzantine Empire effectively came to an end. Shock waves reverberated around Christendom and, for a brief moment, rekindled enthusiasm for a great Crusade.

Among the few results of this short-lived excitement were several elaborate manuscripts

made as a form of Crusading propaganda. One was a beautifully illustrated copy of Bertrandon de la Broquière's *Voyage d'Outremer*, probably made in Lille around 1455-6. The original book had been transcribed by David Aubert, a native of Hesdin who became a canon of Lille, presumably being dictated by Bertrandon himself. The existing magnificent version of 1455-6 was written down by Jean Miélot, another canon of Lille. Its superb illustrations are in a Flemish style and are attributed to Jean de Tavernier, a miniaturist from Audenarde. This *Voyage d'Outremer* remained in the Burgundian Library until the French Revolution when it was taken to Paris. As for the great Crusade to regain Constantinople while the Ottoman Turks swept deeper into south-eastern Europe, Bertrandon de la Broquière remained seigneur of Vieux Château and adviser to Duke Philip the Good, and in 1459 he died in Lille.

Sources:

- J. Bartier, 'Légistes et gens de finances au XVe.', *Memolires de l'Académie royale de Belgique, Classe des Lettres et des Sciences Morales et Politiques*, 2 vols. (1955-57)
- J. Calmette, *The Golden Age of Burgundy* (London 1949)
- M-T. Caron, *La Noblesse dans le Duché de Bourgogne 1315/1477* (Lille 1987).
- O. Cartellieri, *The Court of Burgundy* (London 1929).
- M. De Barente, *Histoire de Ducs de Bourgogne de la Maison de Valois 1364-1477: Tome Septième, Philippe-le-Bon* (Paris 1825).
- C. D'Hozier, *L'Armorial général de France* (Dijon 1875).
- V. Fris, 'La bataille de Gavre, 23 Juillet 1453, *Bulletin de la Société d'histoire et d'archéologie de Grand XVIII* (1910), pp.185-233.
- A. Grunzweig, 'Philippe le Bon et Constantinople', *Byzantion* XXIV (1954) pp.47-61.
- E. Heer, 'Armes et armures au temps des guerres de Bourgogne', in *Grandson 1479* (Lausanne 1976) pp.170-200.
- M. Izzedin, 'Deux Voyageurs du XVe siècle en Turquie: Bertrandon de la Broquière et Pero Tafur', *Journal Asiatique* CCXXXIX (1951), pp.159-174.
- G.R. Kline (trans.), *The Voyage d'Outremer by Bertrandon de la BrocquiGre* (New York 1988).
- C. Marinesco, 'Philippe le Bon, Duc de Bourgogne et la Croisade', in *Actes du VIe Congrès d'Etudes byzantines*, vol. 1 (1950) pp.147-168.
- D. Nicolle, *The Mamluks 1250-1517: Osprey Men-at-Arms no. 259* (London 1993).
- J. Paviot, 'Croisade bourignonne et intérêts génois en mer Noire au XVe siècle' (Genoa 1988).
- U. Plancher, *Histoire générale et particulière de Bourgogne*, 4 vols. (Dijon 1739-81).

Steam Sappers

Steam Engines in the Boer War

Among the earliest examples of mechanised military transport, traction engines found a role for themselves in South Africa and were even considered as armoured fighting vehicles. DAVID FLETCHER of the Bovington Tank Museum follows their performance on campaign.

The British Army of the Victorian Era was not famed for its innovative tendencies. Indeed, bearing in mind the length of the reign and the massive technological advances which it embraced, there was probably no section of society that enjoyed such a reactionary reputation except, maybe, the church.

Some individuals within the Army enthusiastically endorsed all these novel ideas but they had need to be devoted to their cause and tenacious if they ever hoped to shake the foundations of Horse Guards. The matter of mechanical road transport might be taken as a typical example. The Army, which curiously seems to have taken to the railway without demur, would not countenance steam engines on the road, even though they could be directed to follow the field army much more easily than a railway. In this it tended to mirror public opinion for the pioneers of mechanical road transport had a very hard time of it indeed.

Military representatives had examined some crude traction engines at the time of the Crimean War, and even purchased one or two; but for the next thirty years, although the machines improved in power and reliability, only a relative handful were obtained for military purposes. In the 1870s, production, such as it was, was dominated by the Rochester firm of Aveling & Porter. Their Steam Sapper was developed specifically for military work. It was the first type to go on campaign with the British Army when Sir Garnet Wolseley took one to the Gold Coast in 1873, and it enjoyed some export success. However a decade later Avelings were being eclipsed, in military service, by John Fowler & Co., of Leeds. There had been technical developments too. As the century neared its end the simple, agricultural, traction engine had been joined by the road locomotive, generally a larger, more powerful machine equipped with springs and compound cylinders, designed for long distance, heavy haulage.

In the service, steam engines were regarded as the province of the Royal Engineers, hence the title Steam Sappers which tended to cling to them even after the original model had been disposed of. One of their greatest promoters within the Corps was Colonel J.L.B. Templer. It was not, therefore, surprising that when the Boer War began in October 1899, and the War Office decided to raise a steam road transport company to serve

in the region, Templer was appointed Director of Steam Road Transport. No 45 (Steam Road Transport) Company was formed, officially, on 1 November 1899 although in fact personnel and engines had been gathering at Aldershot for some time. The first consignment was shipped aboard the *SS Bulawayo* at Southampton on 3 November.

It was two weeks before the ship sailed, and a month later it docked in Cape Town, but these were early days and confusion reigned. The engines were finally unloaded at Durban. On 5 December a second ship, the *SS Denton Grange*, sailed from Southampton with a follow-up contingent but she ran aground on entering Las Palmas in the Canaries and had to be beached. Two engines and some wagons from the deck cargo were transferred to the *SS Yoruba* but the rest were salvaged steadily over the next few months, shipped to the Cape and refurbished. It did not seem to do them very much harm.

In South Africa, although Templer assumed overall command, the immediate CO of No 45 Company was Major G.P. Schofield and, for administrative purposes the unit came under the Director of Military Railways, Sir Percy Girouard. Even so it was not busy. There was no experience to fall back on and local commanders either ignored them or demanded the impossible. In addition there was a shortage of skilled drivers. Most were sappers trained in submarine mining —



In the works yard of Fowlers at Leeds one of the big armoured engines uses its winch to wind a howitzer

up ramps into one of the armoured wagons. Note the open rifle loophole in the rear section.

for which there was not much demand in South Africa — who had been redeployed. Schofield found that the majority had 'qualified' after a few hours driver training on the Chattenden & Upnor railway, which wasn't the same thing at all. The unit also included ten civilian drivers, well paid to begin with who drew even more if they went 'up-country', and that caused a good deal of bad feeling.

The range of engines serving with the company included Avelings, Burrells, Marshalls and McLaren's along with at least ten different types of Fowler, most requiring different driving techniques and not all of them new. This created a spares nightmare, even when spares could be obtained. The average engine could handle up to four traction wagons, or three and a water tender if long trips across the veldt were contemplated, and on occasions they were employed to haul and emplace heavy guns, but it took a long time for their usefulness to become established. Once, in the early days, Lord Roberts required supplies urgently at Boshof in the Orange Free State. Against the advice of the experts, three road trains were despatched from Kimberley along a route which had not been reconnoitered. The result was that they ran short of water and fuel trying to battle through deep sand and, while other engines were sent out to recover them, the GOC had to get in emergency supplies by mule train. It was a failing that he never forgot. On the other hand there was an occasion when one engine recovered a ditched wagon which 80 oxen had failed to shift and, as the war dragged on, other advantages were discovered. In the first place steam engines did not catch rinderpest, which decimated the animals and they didn't need feeding when they were not working. Better still if something broke you did not need to shoot a traction engine!

There is one occasion on record when some engines were engaged in an action. In June 1900 three engines, under Captain Gardiner were sent by rail from Bloemfontein to a place called Viljoen's Drift where they were required to help with the construction of a bridge over the Vaal river. It turned out that the Boers had cut the line at Honing Spruit so the traction engines were unloaded at Kroonstadt instead and began to look for work. They got more than they bargained for. On 23 June, Gardiner was ordered to join up with an ox convoy bound for Lindley. Gardner protested against such misuse, the relative speeds of the two forms of transport were incompatible and oxen normally travelled at night. He was assured that the trip would only take four days, that the road was good and water could be found every six miles or so. It was a common enough situation. Officers unfamiliar with things mechanical always had an inflated idea of their capabilities and, like officers everywhere put a positive gloss on operations whether it



The Burrell compound No 2224 bogged down on a bush road in the Transvaal.

was justified or not.

Each engine was hauling about 25 tons but on at least three occasions at river crossings they also had to winch most of the ox wagons through deep drifts (fording places) since the animals were in poor condition and too weak for the work. Some 20 miles from Lindley the Boers appeared, but were driven off by the rearguard. However they were prepared to bide their time and hung around on the flanks until the convoy arrived at a drift which had a steep hill, or kopje, on the other side. Here it was necessary to split the trains because each engine could only manage two wagons at a time on the gradient. At this point the Boers attacked again, drove in the rearguard and came to within 400 yards of the engines. With no friendly troops between them and the Boers, the men on the footplates opened their regulators and set off, each with two wagon loads of groceries in tow, leaving behind five wagons of oats.

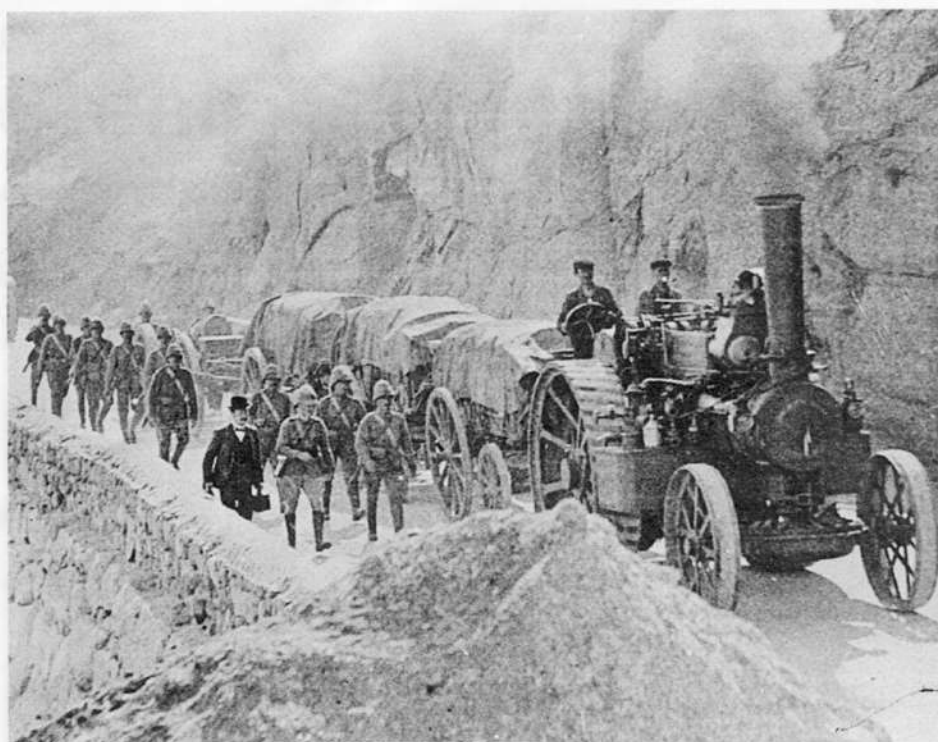
They rolled into Lindley at 2am the next morning and, four hours later, set off with a strong escort to see if the abandoned wagons could be recovered. They were found unharmed and brought back, it was believed that the Boers kept away from the wagons, suspecting a trap. Despite the optimism of their advisors the full trip had taken seven days. All the coal was used up and much of the water they had sucked up from scattered

waterholes proved so dirty that the engines were all in need of a good wash out. First however they had to get back to Kroonstadt, which they did in two days, burning blue gum logs in place of coal.

Instances of the Boer Army using traction engines are rare but two are on record where civilian machines were discovered in towns that they occupied. In each case they requisitioned the engine and its crew but made no effort to pay them for their services. As a result very little maintenance was done and the engines rapidly deteriorated.

Maintenance was a continual headache for the British too. Heavy repairs could only be undertaken at major bases but simple tasks, simple here being a relative term, were carried out in field workshops established at out stations. Railway workshops provided help when they could, as did the huge De Beers mine complex at Kimberley, but it was not helped by a War Office habit of despatching more and more worn out engines from Britain instead of investing in new ones. Likewise many of the wagons proved too flimsy to stand up to the work and it says much for the handful of officers attached to No 45 Company that they achieved so much, often of an improvised nature, under considerable pressure from the GOC who wanted as many engines as possible on the road, all over the country, all the time.

At the height of its powers No 45



Fowlers hauling trains of wagons and heavy guns on a trial trip around Cape Town.

Company had 47 engines on strength, but it was never sufficient. Twenty more were ordered in 1902 but only arrived after the fighting was over. Experience showed that it was better to employ the Fowlers in the field and keep the odd makes closer to home, mainly around Cape Town and Port Elizabeth. One odd tendency, reported by Schofield, was a reluctance, on the part of the Boers, to trouble them. Railways were a popular target, and ox-drawn convoys would be attacked on the same road only hours after a steam convoy had moved down it unscathed. The reason seems to have been that Boer Commandos had no means of destroying the engines, so they regularly travelled with very light escorts.

In 1900 No 45 Company was joined by another unit which operated traction engines. This was a specialist organisation known as the Electrical Engineers (Volunteers) Royal Engineers, which was formed mainly of civilian professionals, under that redoubtable pioneer of electrical engineering and road transport, Colonel R.E.B. Crompton. Its role was twofold. It laid and maintained telegraph and telephone communications in the field and operated searchlights. For the latter it needed a mobile power source and had brought with it three Burrell compound engines, each equipped with a Laurence Scott dynamo, driven off the engine while it was stationary. At Pretoria they somehow got involved in the movement of heavy guns and ended up appropriating a couple of Fowlers of the SRT which were not being handled well. Crompton was sent home later in the year to supervise the development of military

transport and the importance of the unit diminished.

The idea that steam engines could be adapted as fighting vehicles dates back to the Crimean War, if only on paper. During the Boer War it was realised. The suggestion is said to have come from Lord Roberts as early as December 1899 and it was certainly acted on promptly. Fowlers provided four of their biggest road locomotives and built special armoured wagons for them, to the design of Captain Nugent at the War Office, using Krupp bullet proof plate. The engine was enclosed in armour and the wagons were designed to carry stores and troops, for whom loopholes were provided to shoot through, or even transport field artillery which could be loaded by winch through the rear doors. The first two such trains arrived in Cape Town in July 1900 but they were forbidden to operate around the city because their huge straked wheels tore up the roads. They were taken up to Bloemfontain but nobody could find a use for them so the armour was removed from the engines, which went into regular service, while the bodies of the wagons were placed in railway trucks to create armoured trains. It was a dismal end to an exciting enterprise; imagine self-propelled armoured vehicles in action in 1900!

Developments in road transport at home affected events in South Africa. A number of firms had been experimenting with self-contained steam lorries, much smaller than traction engines with a useful payload of about five tons. In 1901 the War Office staged a trial of such vehicles at Aldershot and two were considered suitable for military service;

a Foden and Thornycroft. The former was a rugged machine, built along traction engine lines with a load carrying body at the back. The Thornycroft was far more original, of forward control layout with a vertical boiler at the front and the engine tucked away beneath the chassis. It was of much lighter construction. Both vehicles arrived at Cape Town in February 1902 and were stationed at Kroonstadt. In a comparative trial with steam road trains, which could handle three times their payload, they proved faster, more flexible and economical in terms of manpower and fuel. Asked to comment, Lord Kitchener pronounced steam 'lurries', as they were then called, the coming thing adding 'Thornycrofts are the best'.

From 1902 the nature of the war changed as Kitchener's strategy gradually drove the Boers from the land. He established chains of blockhouses and the road trains were used to supply them along secure routes. There was still a chronic shortage of drivers and those that were serving had a hard time of it. These secure routes handled an increasing amount of traffic, most of it still four-footed, which churned up the surface and turned it to dust. On many occasions, when a strong wind was blowing, such clouds of dust were whipped up that the engines had to stop because the steersmen couldn't see where they were going. When the war ended, in June 1902, the SRT still had 46 engines and the two steam lorries. Some two weeks later the whole lot, including workshops, tools, spares and stores were all sold off for £110,000. Schofield prepared a most thorough report which pulled no punches and it was largely due to his success that mechanical transport now became a significant feature of the British Army. As in subsequent wars the immediate reaction at home was to capitalise on the experience and build ideal military vehicles on a no-expense-spared basis. Fowlers produced some superb quality engines over the next few years which might have lasted for ever, if they hadn't proved more valuable as scrap for their copper and brass when the Army had finished with them. Thornycrofts were encouraged with some useful orders for their steam lorries until petrol gained the upper hand and, in 1903, the War Office took the logical step of transferring responsibility for mechanical transport from the Royal Engineers to the Army Service Corps ●

Sources:

Layritz, Lt-Col. O. *Mechanical Traction in War*, David & Charles reprint, 1973
Lane, M.R. *The Story of the Steam Plough Works*, Northgate Publishing 1980.
Schofield R.E., Major G.P. *Report on Steam Road Transport in South Africa*, HMSO 1903.
Crompton, Lt-Col. R.E.B., *The Electrical Engineers R.E. in South Africa*, Institution of Electrical Engineers 1900. Anon, *Report on Trials of Self-Propelled Lorries for Military Purposes at Aldershot*, unpublished, 1901.

A Tank in Every Village

Ardennes Battlefield Tour

The Battle of the Bulge in December 1944 was Hitler's last offensive in the West and the shock of his Panzer divisions very nearly reversed the achievements of the Allies. Fifty years later, ROD HOPKIRK revisits the battlefield and notes some of the museums to be seen there.

Driving around the Ardennes in eastern Belgium, it seems as though there is a tank in every village, if not a Tiger in the forecourt of every petrol station then at least the turret of a Sherman marking the corner of a market square. This year sees the 50th anniversary of the Battle of the Bulge in December and the Ardennes is very well prepared for it with several first class museums of World War Two militaria and a host of memorials and relics of war to make it a very visible

battlefield tour.

The Ardennes offensive was a ferocious surprise for the Allies. It was 5.30 in the morning of the 16th December 1944 when the sky was set ablaze over an area of 139 kilometres in the heart of the Ardennes from Monschau to Echternach. The Allies thought the Germans were beaten, but they were badly mistaken. Marshal Model commanded the attack with three German divisions. It was Hitler's last chance for an offensive — operation *Herbstnebel*, 'Autumn Fog' — and as luck would have it, there was fog. The main thrust should have been made to the north of the front where the 6th division under General Dietrich was massing the finest SS divisions that the German army could still call upon with new Tiger tanks. Facing them was the 5th corps of the US army under General Gerow with large numbers of inexperienced soldiers who had never been under fire.



Monument to General Patton at Bastogne.



German Panther 1 Tank in the Ardennes village of Celles near the furthest point of advance of the German offensive.



Bastogne Historical Centre, the major World War Two museum in the Ardennes.

In the middle of the offensive was General Manteuffel who led the 5th Panzer division targeted at the lines of the 8th corps of the US army under General Middleton. To the south was General Brandenburg and his 7th division face to face with the 8th corps of the US army. The German superiority of numbers — three to one — was devastating. Despite fierce resistance from the American soldiers, the Allied front was broken. Hitler was jubilant. He planned to cross the Meuse three days later and to take Antwerp on the 27th December. In reality, the battle of the Ardennes was to last more than a month and to be the bloodiest land battle ever fought by the US army.

Fog kept the Allied air forces grounded, leaving the field open for the Germans to advance swiftly. In the Allied camp, everyone was completely taken by surprise. Eisenhower stopped all activity on the advance east to throw his reserves into the breach opening in the Ardennes. Against all expectations, the American frontline centres such as the villages of Krinkelt, Rocherath, and Montjoie resisted strongly, breaking the thrust of the 6th Panzer division, the elite of the Germany army. The first armoured SS division, however, under the command of Joachim Peiper raced on through in the direction of Stavelot and Liege, marking his route with the massacres of American prisoners and civilians.

In the meantime, the first American division arrived after a forced march to reinforce Elsenborn, Saint Vith, Houffalize, Bastogne and Luxembourg. The first German tanks arrived at the ring road around Bastogne at Noville and were met by the parachutists of the 101st US airborne division charged with defending Bastogne at all costs.

The combat was fierce. Elsewhere, two entire American regiments of more than 2000 men were taken prisoner by the Germans in one attack on the Schnee Eifel. The 3rd Panzer division which had bypassed Bastogne was advancing on Marche en Famenne, Dinant, and the Meuse.

Driving around the Ardennes today, it is still very easy to get caught up in the speed and urgency of this battle, following thrusts and counter-thrusts on a map with many of the villages and much of the landscape unchanged from 1944. Principle points of location, however, are the major military museums with the very best being at Bastogne, the heart of Allied resistance, laid siege by the Germans for the best part of a month. The collection at the Bastogne Historical Centre (tel: 061 211413) was begun in 1945 by a young man called Guy Franz Arend who simply gathered the pieces of weaponry littering the land around the town. Now it is widely acclaimed as one of the finest World War Two museums in the world with a comprehensive range of uniforms, weapons, and vehicles ranging from Russian-campaign straw overboots to the leather coat worn by General Manteuffel during the battle and later donated by him to Arend. This museum at Bastogne should then be followed by a visit to the Victory Memorial Museum (tel: 3263 219988) along the E411/E25 motorway towards Luxembourg at Hondelange near Arlon. The Victory Memorial Museum has the largest collection of military vehicles in the world with more than 200, including some rare pieces, such as complete ranges of half-tracked vehicles (all German series models and representative vehicles from Britain, Belgium, United States, France, Italy, Poland, and Czechoslovakia,

and that's just half-tracks!). You can't miss the museum — there's C47 transporter plane parked outside.

There are also many smaller museums in the Ardennes which are equally impressive having been begun by local collectors who gathered material immediately after the battle and have since bought equipment and uniforms to make fully comprehensive museums. The best of these are Museum of the Battle of the Bulge in La Roche-en-Ardenne, started by the local butcher, with over 100 uniforms, and the December 1944 Historical Museum at La Gleize with a King Tiger parked outside and some excellent German camouflage inside. A good place to stay in the middle of the battlefield with easy access to all the villages and museums is Marche-en-Famenne which has a reasonably priced three star hotel recently converted from an 18th century church (Quartier Latin tel: 084 321713). Also, a family run hotel at La Roche is convenient and friendly (La Claire Fontaine tel: 084 411296).

Action by British troops in the Battle of the Bulge has not attained the significance of American involvement and understandably so. American land forces numbered 600,000 committed by January 1945 with the dead numbering 8447, whereas British involvement was 25,000. That said, Montgomery's holding action in the north was vital and 665 of those killed in the battle lay buried at the British and Commonwealth Military Cemetery at Hotton, 10 km southwest of Marche-en-Famenne.

Further travel information can be obtained from the Belgian Tourist Office, 29 Princes Street, London W1R 7RG (tel: 071-6290230) ●



Monument to the 13th Lancashire Parachute Regiment, 6th British Airborne Division, at Bure.



Partizan Press

816-818 London Road, Leigh-on-Sea, Essex SS9 3NH. Tel./Fax: 0702 73986

Renaissance

Notes & Queries

2 issues to date

English Civil War

Notes & Queries

49 issues to date

18th Century

Notes & Queries

10 issues to date

Subscriptions to each cost £8.50 inc. postage.
Start, renew or extend your subscription to 2 or more of the
magazines (£17.00) and we'll throw in an extra issue.

Caliver Books

816-818 London Road, Leigh-on-Sea, Essex SS9 3NH

WARGAMES & HISTORICAL MAGAZINES

(All prices are for 5 issues and include postage & Packing (AIR))

| | UK SAMPLE | UK SUB | EUROPE SAMPLE | EUROPE SUB | WORLD SAMPLE | WORLD SUB |
|--|--------------|-----------|------------------|---------------|-----------------|--------------|
| EMPIRES, EAGLES & LIONS (4) | £4.50 | £20.00 | £5.00 | £22.50 | £5.50 | £25.00 |
| THE COURIER (63) | £4.50 | £20.00 | £5.00 | £22.50 | £5.50 | £25.00 |
| SCENARIOS FOR WARGAMERS (3) | | | | | | |
| MIWAN (67) | £3.50 | £15.00 | £4.00 | £17.50 | £4.50 | £20.00 |
| HISTORICAL GAMER (20) | | | | | | |
| PRACTICAL WARGAMER | £2.50 | £12.50 | £3.50 | £15.00 | £4.00 | £17.50 |
| FIRST EMPIRE (15) | £2.50 | £8.50 | £3.00 | £11.00 | £3.50 | £12.99 |
| MILITARY ILLUSTRATED | £3.50 | £14.50 | £4.00 | £18.50 | £4.50 | £17.50 |
| STRATEGY & TACTICS | £11.50 | £50.00 | £12.50 | £57.50 | £12.50 | £65.00 |
| PARTIZAN PRESS'S NOTES & QUERIES - RENAISSANCE, ECW, C18th | £2.50 | £8.50 | £3.00 | £11.00 | £3.50 | £12.99 |
| (Prices are for 12 issues and include postage & packing (AIR)) | | | | | | |
| MINIATURE WARGAMES | £2.75 | £25.00 | £3.00 | £29.50 | £3.50 | £37.50 |
| WARGAMES ILLUSTRATED | £2.75 | £25.00 | £3.00 | £29.50 | £3.50 | £37.50 |

EIGHTEENTH CENTURY MILITARY NOTES & QUERIES

Warfare in the Age of Reason 1660-1780



No.10

£1.75

ENGLISH CIVIL WAR

Notes & Queries



No.48

£1.75

RENAISSANCE NOTES & QUERIES



No.2

£1.75

THE AGE OF NAPOLEON



COLONIAL CONQUEST

THE MAGAZINE for the
COLONIAL WARGAMER
and HISTORICAL READER



THE MAORI WARS

COLONIAL CONQUEST

THE MAGAZINE for the
COLONIAL WARGAMER
and HISTORICAL READER



FRENCH FOREIGN LEGION

My War In Sketches

RAY NEWELL was a prisoner of the Germans from 1942 to 1945. In over forty sketches he captured the wide range of nationalities kept in his prison camps. Here, he tells his story.

Most of these portrait sketches were made between 1943 and 1945 in Stalag IV B Mahlberg on Elbe, Germany. The Camp housed about 20,000 men from numerous different Armies separated by wire fences, nationally. When we first arrived in the Camp in October no communication was permitted between the different ethnic compounds. But pressure on the Wermacht

by the Red Army meant the despatch of more and more German troops to stem the breakthrough and consequent depletion of Prison Guards and relaxation of Internal Boundary Policing. They kept the external boundaries fully manned however.

As an Art Student I had joined the Artillery in 1940 and was posted to the Middle East in early 1941. After travelling through Palestine to Syria and back I landed up in the Western Desert.

When Tobruk fell in June 1942 I was acting as rearguard Artillery above Halfaya Pass to protect the retreating forces descending the Pass. We dug in again at Mersah Matruh and when the Germans

outflanked us to the south we attempted to break through to re-establish defence lines at El Fouqua but got blown up on a minefield. After running around for a bit we were eventually captured by an Afrika Korps column somewhere south east of Mersah Matruh. The Germans took us back through Bardia to Tobruk and, with profuse apologies, handed us over to the Italians.

I had never put much credence in the stories of antagonism between the Axis Allies until I witnessed it as a P.O.W. The Germans despised the Italians who really hated them in return.

The Italians transported us back through Derna to Benghazi. Here they dumped us in a desolate wire enclosure in the Desert. They issued us with one Italian Army groundsheet each and some metal rods but little else. By joining in with a couple of companions one could button the three groundsheets together and so make a crude tent. Sanitation arrangements were non-existent until we dug some trenches but Army Form Blank never materialised. As dysentery became prevalent it was pretty unpleasant there. Rations were tight and both food and water very irregular in arrival. We could spend hours queuing for the water ration only to have the supply run out before getting any.

After some weeks of shocked inactivity I started sketching for something to do and to relieve the boredom. I soon found that my bearded companions in misery would pay a couple of cigarettes for a souvenir sketch. Cigarettes were the recognised currency for nearly all transactions in Prison Camps and remained so for all the time I was incarcerated. As a non-smoker I had been giving my cigarettes away until I found their true value after which I started using them for bartering.

The sketches were drawn on fly-leaves of Bibles, Pay Books or novels or any other scrap of paper that had not been used for other purposes. I used the cigarettes to barter



German Ober Gefreiter. Camp Guard, his uniform consisted of field grey riding breeches and highly polished boots. His wife and daughter were killed later in the Dresden bombing and his son was missing on the Russian front. He had been a prisoner of war, yet he showed no bitterness towards us. Caused a bit of consternation as, while he sat, some of the British were digging a tunnel under the hut so could not get out until he finished posing. 24.6.44.

Russian found scavenging for fats in the garbage incinerator. He was a barber in civvie street from a town about 300 Kms from Moscow.

The Russian rations were worse than our basic German rations. The Russians did not have the advantage of International Red Cross protection or the receipt of Food Parcels which kept us alive. When parcel delivery was regular — food filtered down to them. Who eats ersatz white margarine tasting like cart grease when there is a supply of Canadian butter? But when we were reduced to living solely on the German rations the charity soon fell away. Drawing in pencil on packing paper. 25.2.45.

for pencils, crayons, paper etc. but more importantly — for food! This meant an improvement in my living standard. Even so I weighed under eight stone by the end of the year.

After the Battle of Alamein and the Eighth Army advance, the Germans ordered our evacuation, first to Tripoli, then in December to Italy to a permanent camp and official registration as Prisoners of War. Campo Concentramento 85 at Tuteurano near Brindisi.

In Italy I sold my sketches to any bidder and managed to get a few commissions from the Italian Medicos for portraits in crayons. They paid for them in extra food, so by stretching out the drawing time, I could eat for a couple of days for each drawing.

Previously a group of us had joined together to produce a news-sheet-cum-magazine in wall magazine format called Benghasi Forum and we continued it as Tuteurano times in Italy. We even managed to secure 'Employed Person Status' which meant double rations and that coupled with occasional Red Cross parcels meant things began to look up. However nearly all the sketches done at this period were sold for extra comforts — a towel — a pair of socks and a second shirt etc.

In July, Sicily having been successfully invaded, we were moved north, eventually to Fermo, inland and north of Ancona. I had lost a few things in the looting when we were searched in transit but managed to keep my pencils — so sketched on.

September saw the end of Italy's participation in the war. We were free! Ha! Ha! Orders were issued by the Senior British Officer in the camp that we were not to leave, and to enforce those orders, an armed guard of British ex P.O.Ws. was mounted until the Germans took over. A week later they packed us in cattle trucks and after three or four days, journeying through Northern Italy and Austria, we arrived at Jacobsthal Concentration Camp, carrying all the Red Cross food parcels and bread that we could manage.

We were told that we would stay there until space could be found for us in an official Stalag or prison Camp for Army Personnel. German P.O.W. Camps were separately



named — Stammlager abbreviated to Stalag, for Army, Luftlag for Air Force, Marlag for Navy and Oflag for Officers.

Certainly Jacobsthal was no holiday camp! Our compound had held thousands of Italians who had chosen internment rather than join Mussolini's Neo Fascisti Army. They suffered accordingly, living in most insanitary conditions. We soon collected a goodly supply of body lice, fleas etc. a scourge we had not endured since early Italian times.

The next compound housed hundreds of Russians in various stages of malnutrition. The more fit mooched around the dividing fence dressed in long striped night-shirt like garments. We tossed over scraps of bread and food until the German Guard drove them off with rifle butts. We could afford to be generous as we still had our accumulated Red Cross goodies!

At the end of October we moved to Stammlager IV B Muhlberg and met up with True Teutonic Efficiency. Mass production de-lousing. We showered, then lurched past a horse-clipper manned by a morose Russian,

who clipped every vestige of hair from our persons. Then past an equally miserable one who smeared us with an evil-smelling tar like substance. Our clothes, meanwhile having been fumigated, we were duly photographed and registered Kriegsgefangenen.

We entered one of the huts — 53B — two hundred men sleeping in three tier bunks. A central stove, brick chimney with hot plates serving for heating and cooking, fired with coal briquettes made in the camp from mud and coal dust. We shared a wash-house with 53A, concrete troughs with cold water only. Each hut had a night latrine as after dark the huts were locked and the compounds had dogs and guards roaming about.

Stalag IV B was very well organised as far as Red Cross and Y.M.C.A. comforts were concerned. I started an Art Class and as a registered Art Teacher was very soon on the list for parcels of Art Materials and Books. With teaching, sketching and producing the magazine I kept pretty busy but soon started this collection, in all about forty different national types ●

Roman Archery Tested

The battlefield effectiveness of ancient Roman and barbarian arrowheads against Roman armour is tested by DUNCAN MASSEY of Manchester University History Department. In this report he analyses the results.

Although we have textual and pictorial evidence of Roman archery, this is subject to distortion. All the textual evidence is written from the Roman side, and may be partial in both senses of the word. We know from investigation of other artefacts depicted on such sources as Trajan's Column that the artists frequently distorted objects to avoid obscuring the faces of individuals or to preserve the artistic impact of a scene. Many details, such as arrowheads or fittings and fastenings on armour, are simply too small to be depicted accurately at the given scale.

Consequently it was decided to test reconstructions of known arrowheads against various body defences used in Roman times and attested in the archaeological record. These were ring mail (*lorica hamata*), scale armour of steel or brass plates (*lorica squamata*), and the strip plate armour (*lorica segmentata*) introduced from the middle of the first century AD onwards. The first two types were also used by other cultures such as the Sarmatians, Parthians or Celts, with all of whom the Romans came into conflict.

The arrowheads were copies of particular examples found on both Roman and native sites, and can be divided into two basic categories. 'Broadheads' are in effect small spearheads, intended to be used against soft targets, killing by cutting internal organs, blood vessels, arteries etc., in much the same way as a knife wound. The second type, or 'bodkin' point, lacks the sharp cutting edges of the broadhead. These are either square, round, or triangular in cross section, and the design emphasis is on penetration at the expense of the improved lethality of the broadhead. These are generally employed in areas where the enemy is expected to wear body armour. These two categories were further subdivided by being made in both tanged and socketed examples. It has frequently been asserted that tanged arrowheads are generally inferior to socketed examples, and it was hoped that the experiment might give some indication of why the usually efficient Romans used both types.

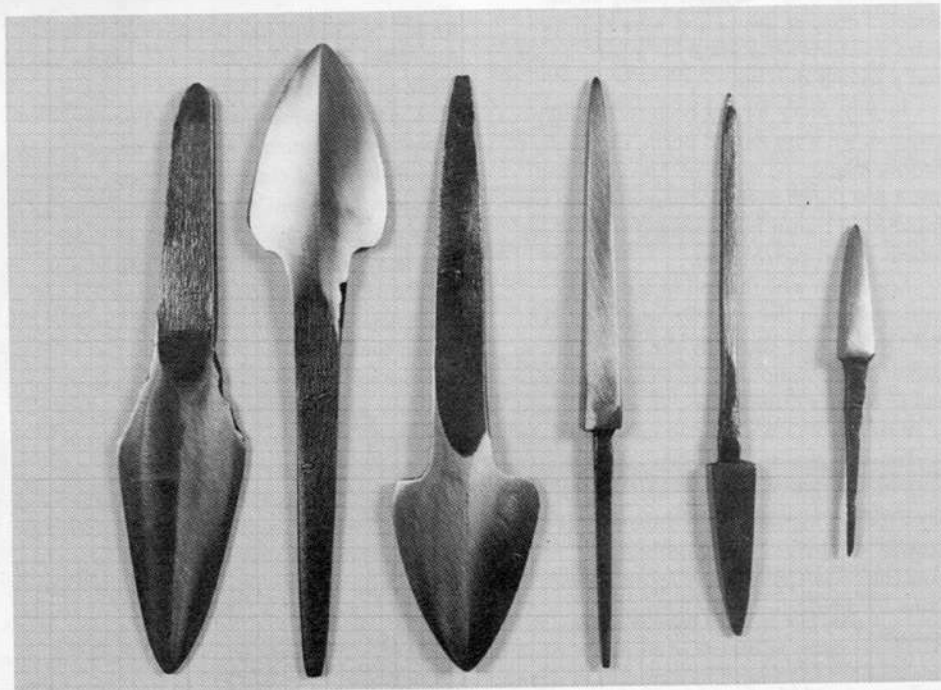
Modern bows were used for the experiment, their efficiency and the energy and momentum imparted to the arrow being measured and calculated for comparison with the performance of reconstructions of known ancient bows. From the figures obtained, similar performance could be expected from a Roman bow of 60-70lbs draw weight, well within the capacities of practised archers such as the Syrian auxiliaries serving in the Roman Army.

Sections of both the scale and ring mail armour were hung against a straw backstop, rather than being pinned tightly to it. It was reasoned that neither type would be worn too tightly, as this would limit the flexibility of the armour. It was accepted that penetration would be lessened by the movement of the armour absorbing some of the arrow's energy on impact. The *lorica segmentata* was placed on a mannequin in front of this same backstop. The first series of shots was loosed at 35m, this range being lessened to 20m in the event of an arrowhead failing to penetrate a particular defence. In extreme cases of failure the range was lessened to seven metres, this being more to test the arrows and armour to destruction than to simulate any likely battle conditions.

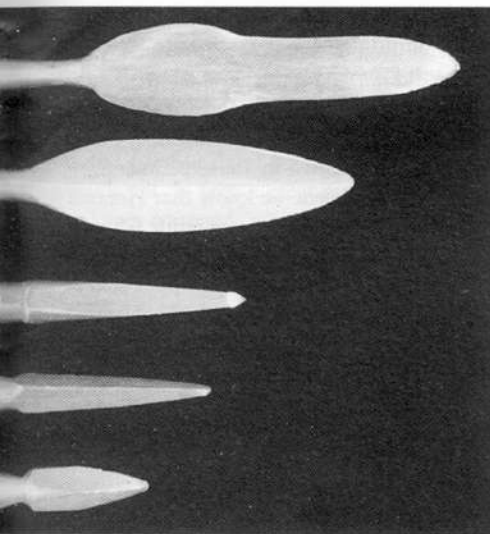
The Ring Mail (*lorica hamata*)

At 35m, all the socketed arrowheads except one consistently penetrated the ring mail to a depth that would prove lethal to the wearer. The only socketed arrowhead consistently defeated by the mail was the native 'spear' head type. This would have been much more lethal against unarmoured targets than the bodkins, but only once penetrated the mail to more than half the length of its blade, on one occasion bouncing off at a range of only seven metres. The tanged arrowheads proved greatly inferior in penetration, none of the bodkins penetrating the mail further than the beginning of the binding of the shaft, even when shot at 20m. None of the tanged broadheads penetrated at all, even at seven metres.

On occasion, bunching of the mail at the suspension points prevented penetration beyond a depth of 3-5 cm. This implied that



Tanged broadheads and bodkins before fitting (each square is 1mm).



Socketed reproduction arrowheads. Top to bottom: Nydam type 1 (abruptly tapering); Nydam type 2 (spear); long medieval bodkin; long Roman bodkin; short heavy bodkin.

on at least one occasion. They were all also defeated by this armour at least once. The reasons for this apparent inconsistency appear to be due to the way in which the scales were assembled and to the shape of their lower edges.

As the scales are designed to overlap each other, an arrow striking the mid point of the lower half of a scale may have to penetrate three individual scales before defeating the armour. On no occasion did this occur, either with brass or steel scales. The bodkin points produced neat square-section holes in the top scale, a smaller hole or a large dent in the intermediate scale, and a small dent in or deformation of the lowest.

The best penetration (to lethal depths) occurred when the arrow struck the top of a scale. This upper area is intrinsically weaker than the lower area of a scale due to its being pierced to allow it to be joined either to neighbouring scales or to a backing garment. As the top of a scale should be covered by the lower edges of the two above and to either side of it, the arrow had to bypass those scales in some way. This was caused by the tapered shape of the bottom of the scales: when an arrow struck in the inverted triangle formed by the lower edges of those scales it glanced into the upper area of the scale beneath.

A second series of tests were performed upon the scale armour when it had been strengthened by wiring it together in a series of horizontal rows, much more tightly spaced

than before. Although this reduced the flexibility of the armour and would have made it much heavier, it greatly increased its strength. None of the arrowheads penetrated, even at seven metres, although the scales were severely deformed. On one occasion the impact was such as to tear the end scale of a row completely free and embed it in the straw of the backstop, and two rows of scales were partially torn from their backing cloth. In none of these cases did the arrow head actually pierce that cloth, indicating that the wearer might have been bruised, but would certainly have been unwounded. At seven metres the impact of one shot with the long bodkin tore two linked scales free from their strip and drove them into the backing cloth hard enough to tear it, although I stress again that the arrow head itself did not penetrate.

On the one occasion that the binding of the tanged arrowheads was omitted to see if greater penetration occurred, the impact destroyed the arrow shaft over a length of 18cm from the point, no penetration of the scales occurring at all.

The Plate Armour (*lorica segmentata*)

On no occasion did any of the types of arrowheads tested afford lethal penetration of this type of armour, even at a range of seven metres. Although (because of the profusion of fasteners and its relatively flat shape) the front central area was the best place at which to shoot to ensure that the arrowhead did not glance off, two or three layers of armour overlapped each other here. The extra rigidity of the armour in this location allowed the bodkin pointed arrows to pierce the top layer cleanly, but none penetrated through the armour to a depth of

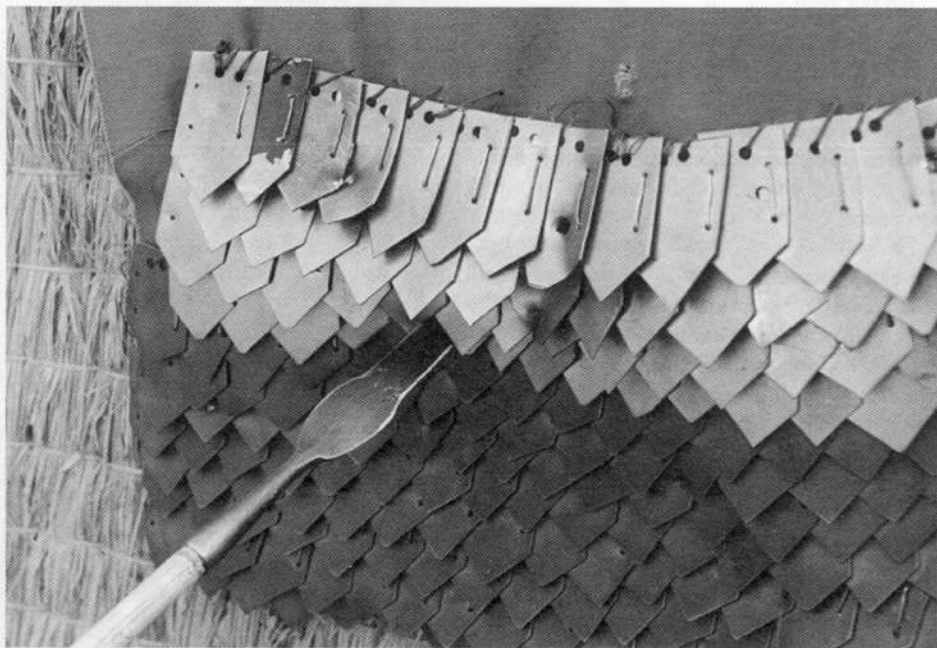
the doubling of mail shoulder defences known to be practised by both Romans and Celts may have saved the life of its owners. Further trials showed that a double layer of mail was pierced only by the socketed long bodkin point to a depth of 6.5 cm at the shorter range of 20 m. The double layer was also pierced by a copy of a long medieval bodkin, but not to the same depth as by the Roman type. None of the broadheads pierced the second layer of mail, even at seven metres, although the tanged bodkins penetrated a little further than the bindings at this range.

The most surprising result was provided by the abruptly broadening Nydam type: at 35 metres it penetrated the mail as deeply as the bodkin points, and once the mail had been penetrated, it would have proved much more lethal. Whilst the point was blunted and damaged by the mail, the sharpness of the cutting edges of the blade was preserved. Thus this type of arrowhead combined the lethality of the broadhead with the penetration of the bodkin. It should however be remembered that at longer ranges the increased weight of this type of head reduced velocity and penetration in comparison with the lighter bodkins. It failed to penetrate the double layer of mail at 20m.

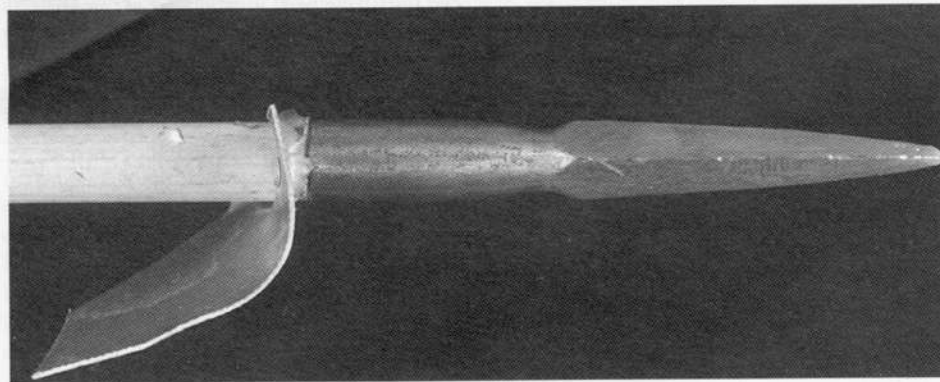
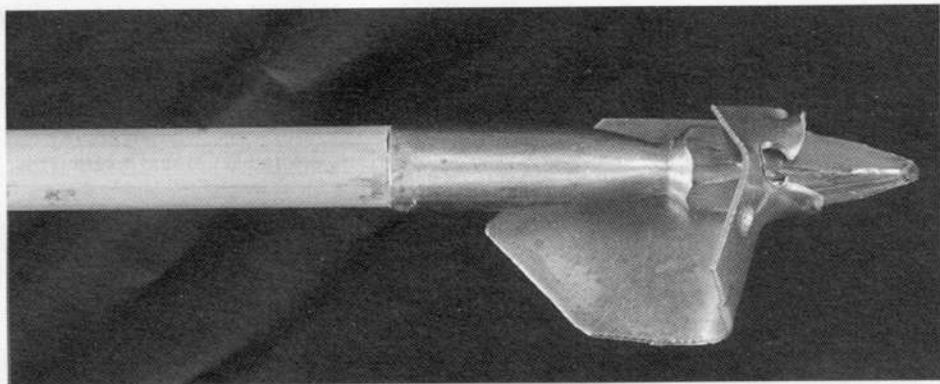
Another unexpected development was that on several occasions the arrow shaft was locked into place by the deformed mail rings through which it had passed, the steel rings gouging deeply into the wood of the shaft. This would make a non-fatal wound considerably more difficult to treat. To try and remove the arrow without first removing the mail shirt would involve considerable manipulation, and therefore aggravation of the wound; to remove the mail shirt first, the arrow shaft would have to be cut off very close to the body, leaving much less purchase with which to remove the point.

The Scale Armour (*lorica squamata*)

All the socketed arrows, including the one defeated by the mail, penetrated this armour



Against re-inforced scale armour, arrows lodge but fail to penetrate. Note much smaller area covered by more closely fastened scales.



Top: Short heavy bodkin through a single scale, limit of penetration.

more than 2 cm, and probably wouldn't even have reached the flesh of a legionary.

Shots directed at the flanks of the armour either glanced off, the heads of arrows often snapping off the shaft, or gave minimal penetration. This was due to a combination of the softness of the metal and the internal gap between the plates. We know that this type of armour was left soft from analysis of surviving fragments: that softness allowed it to deform extensively, thus absorbing the impact of the arrow and denying it the resistance it needed to penetrate effectively. The gap between the plates allowed space for that deformation without the plates being forced into one another, making it more likely that the wearer would retain free movement.

The Shield (scutum)

None of the arrows pierced the shield to a depth that would necessarily prove lethal to its owner, and most barely managed to penetrate to the full length of the head, especially when the shield was covered with leather, as some were known to have been. It is ironic that the cheapest defensive device known to the ancients proved more effective than all but the best armour. The drawback of the size and shape of the Roman shield was that it was designed to be held close to the body, with the arm directly behind the

Above: Long bodkin through a single scale (1mm thick).

shield itself. Any arrows that did pierce the shield would thus have stood a chance of nailing it to its owner's arm.

Whilst not immediately fatal, this would certainly be debilitating.

Conclusions

It must be stressed that the bow used in the experiment represents the weaker end of those used in military archery: from recent work it appears that the medieval English

archer was using bows at least twice as powerful. Even if the archers in Roman service did not attain this level of strength, it is quite possible that long practice enabled them to use bows more powerful than the 60-70lb limit represented by the experiment. From the experiment we know that Plutarch (*Crassus* 24-5) was not exaggerating when he spoke of arrows '... which could pierce armour and go through every kind of defensive covering, hard or soft alike' or of '... hands pinioned to their shields, feet nailed through into the ground, so that they were incapable of either running away or of defending themselves.' Up until the introduction of the *lorica segmentata* in Claudian times there was no armour in widespread Roman use which could guarantee the wearer's safety against arrow attack. When one considers the large areas of the body unprotected by armour, the efficiency of the shield was of paramount importance. Though it is unlikely that arrows would penetrate the shield to a lethal depth, they could certainly incapacitate the holder.

All the socketed arrowheads except the 'spear' head native type proved their efficiency against mail, and all had some degree of success against scale armour. Their relative efficiency was much as predicted, with the single exception of the abruptly tapering native form. It had at first been thought that the shape of this arrowhead owed as much to aesthetics as to function, display often being as important a role of weapons in primitive societies as combat. Whether intended or not, its shape made it much the most formidable projectile for use against a mail-armoured foe, combining good penetration with a large wound. The arrowhead came from the German border of the Roman Empire, and would have been effective against the mailed



Against a Roman shield, little penetration of leather covered sections.

auxiliaries guarding the border. Indeed we know that an attempted crossing of the Rhine by the Romans in the fourth century was repelled by showers of arrows.

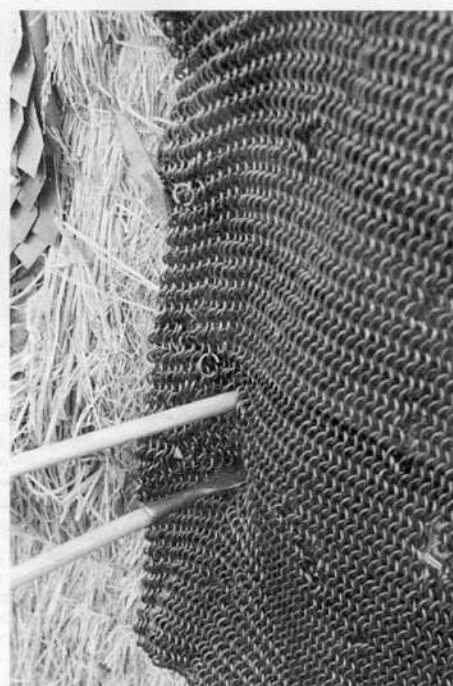
It had been thought that socketed arrows would be less likely to break than tanged arrowheads. In fact, a great number of clean breakages occurred immediately behind the socket due to lateral stress upon impact. Arrowheads of the same design, but with the tanged construction retained in some cases by the Romans, actually proved slightly less likely to break. It is unlikely that the Roman use of an allegedly inferior construction method was due to an increased survivability under battle conditions, as arrows are by nature disposable, although they can be recycled in whole or in part by the victors. Nor can the use of tanged arrowheads be explained by better penetration: the binding needed to prevent the arrow shaft breaking limited this, thus removing any advantage gained by being slightly less likely to dissipate penetrative energy by the fracture of the arrow shaft.

The tanged arrowheads were, however, lighter and faster than the socketed examples, making correct estimation of range less essential for an accurate shot. It is possible that the co-existence of tanged and socketed types of arrowheads in Roman use indicates that more than one type of bow or school of shooting were in use. However, it seems more likely that the distinction was one of manufacture: we know that there were two

production centres or *fabricae* producing arrows in the western empire, and many of the extant tanged arrowheads would have taken very little skill to make, unlike the more complicated trilobate and quadrilobate examples, either tanged or socketed. It seems likely that the simple tanged broadheads or bodkins were made in legionary or smaller *fabricae* in the provinces, either for mural defence or for hunting (for which they would have been perfectly adequate), and were sufficient for their routine needs. The larger *fabricae* at Concordia and Macon (*Notitia Dignitatum*, Oc., IX, 24, 28, 32.), doubtless with workers more skilled than those available at legionary level, are more likely to have been the sources for the huge numbers of arrows needed for major campaigns, as well as the probable source for those arrow heads that were more difficult to construct ●

Sources:

Coulston, J.C., 'Roman Archery Equipment' in ed. M.C. Bishop, *The Production and Distribution of Roman Military Equipment*, BAR International Series, No. 275 (Oxford 1985) 220-348
and Bishop, M.C., *Roman Military Equipment* 1989, Princes Risborough
Davies, J.L., 'Roman Arrowheads from Dinorben and the Sagittarii of the Roman Army' *Britannia* Vol. 8, 1977, pp.357-70
Engelhardt, C., *Nydam Mosefund* Copenhagen 1865
Manning, W.H., *Catalogue of Romano-*



Two native broadheads against ring mail: the spear-shaped one has only penetrated halfway through; the abruptly tapering one has penetrated completely.

British Tools, Fittings and Weapons in the British Museum 1985

Pope, S.T., *A Study of Bows and Arrows* 1923

Rausing, G., *The Bow; Some Notes on its Origin and Development* Lund 1967

July Military Diary

| | | | | | |
|-------|---|--------------|-------|--|-------------|
| 2 | Open Day, Cavalry Barracks, Hounslow 1st Battalion The King's Regiment (M4, June 3, Hounslow West Tube) | 081 818 6527 | 10 | River Day Historic Dockyard, Chatham, Kent. | 0634 812551 |
| 2-3 | Medieval archery, Porchester Castle, Hants. | 0705 378291 | 16-17 | Flying Legends Air Show, Duxford, Cambs | 0223 835000 |
| 2-3 | Tabletop Battles, Southampton Wargames Club, Fort Brockhurst, Hants. | 0705 581059 | 16-17 | An Elizabethan Garrison, Dartmouth. Castle, Devon. | 0803 833588 |
| 2-3 | English Civil War Event, Roundhead Association, Fort Nelson, Fareham, Hants. | 0329 233734 | 17 | Special Events Day, Aldershot Military Museum, Hants. | 0252 314598 |
| 2-3 | Wars of the Roses Event, Stokesay Castle, Shropshire. | 0588 672544 | 17 | Gun firing day, Fort Nelson, Fareham, Hants, 18pdr, 25pdr and Sexton. | 0329 233734 |
| 3 | Life on Rome's Northern Frontier. Corbridge Roman Town, Northumberland. | 0434 632349 | 23-24 | Festival of the Sea at the Royal Navy Museum, Portsmouth, Hants. | 0705 733060 |
| 6 | Beating the Retreat at Kingston Lacy, Dorset. | 0202 883402 | 23-24 | An English Civil War Garrison, Kirby Muxloe Castle, Leicestershire. | 0926 52078 |
| 7-10 | Living History weekend at Basing House Basingstoke, Hants. (Civil War camp). | 0256 467294 | 24 | Heavy Horse Day at Historic Dockyard Chatham, Kent. | 0634 812551 |
| 9-10 | General Patton Days at Breamore House Hants. | 0725 22233 | 30-31 | Fairford Air Tattoo, RAF Fairford. Air show with modern and WWII aircraft. | 0285 713300 |
| 9-10 | Saxons and Vikings, Beeston Castle, Cheshire. | 0829 260464 | 30-31 | Soldiers of the Queen, Osborne House, Isle of Wight. | 0983 20022 |
| 9-10 | English Civil War Event, Porchester Castle, Hants. | 0705 378291 | 30-31 | Medieval Combat, Scarborough Castle, North Yorkshire. | 0723 372451 |
| 11-12 | Warbirds Air Show, Swindon. The B-17 and other WWII aircraft. | 081 994 3375 | 31 | Military Day at the Tank Museum, Bovington, Dorset. | 0929 403329 |
| 11-22 | Exhibition of aviation artists by the Guild of Aviation Artists at the Carisbrooke Gallery, 63 Seymour Street, London. | 071 735 0634 | 31 | Airborne Forces Day at Aldershot. Tickets available from Airborne Forces Day Office, Browning Barracks, Aldershot, Hants. GU11 2BU. | |
| | | | 31 | Life on Rome's Northern Frontier, Corbridge Roman Town, Northumberland. | 0434 632349 |

The 52nd London Arms Fair was held at the end of April and as always it serves as a useful pointer to the state of the arms and armour market. The number of people coming through the doors was up and opening time on the Friday saw a rush of visitors far more concentrated than has been common over the last few fairs. There was also a larger number of European visitors as well as a strong contingent from Canada and a number of Middle Eastern clients.

Visitors alone do not make a fair and the dealers seemed fairly happy after the fair and at least one described it as a 'bonanza'. The number of purchases being checked out at the exit, security as always was tight, seemed to be fairly steady. If further proof were needed nearly every exhibitor booked for the September fair and there is now a waiting list for any vacant tables.

Looking at the items on offer, prices seemed not to have risen quite as steeply as in the past years. Needless to say there were few bargains waiting to be snapped up but there was a fair bulk of items at prices within the range of the smaller collector.

There was not very much armour on offer but there was a fair sprinkling of edged weapons and firearms as usual were in the majority. Militaria seemed perhaps a little less well represented but there were plenty of uniforms, some medals and plenty of badges to be viewed.

In one field there is no dearth of new material and that is in publishing. There were three or four specialist book sellers there and, excluding antiquarian material, the prime area for new books is largely twentieth century with, as might be expected, numerous titles on D-Day and World War II. There are going to be a number of re-

issues of classic books like Blackmore's *British Military Firearms* and Wilson and Sutherland's book on the Colt which up until now has been selling at prices of several hundred pounds. The price of the new editions will be well below that asked for first editions.

The auction houses were there and it is of interest to note that there is a new house in the field. Bosleys auction have already held their first successful sale and a badge sale was held on 18th June. At the moment they are operating on a fairly small basis but judging by the material to be included in forthcoming sales, they are attracting custom. At the moment they are primarily concerned with militaria and badges but they offer good terms such as free illustrations and prompt payment. Certainly their catalogues are very competently produced.

Dreweatt Neate of Newbury are a long established and well respected auction house dealing mainly in fine art and collectors' items. They ventured into the market in their sale of March 30th which included some fifty lots of arms and armour. The great majority sold quite well at prices around the estimates. The most expensive item was a late 16th century German crossbow. It was complete with its cranequin which was a mechanical device for spanning the powerful bow. The two sold for £7600. A single bolt such as might have been shot from such a bow sold for £60. A 17th century German wheel-lock rifle with stock decorated with inlaid plaques of game and various animals was offered together with its combined spanner which was used to cock the mechanism and also served as a powder measure. Together they realised £3200. A small group of daggers sold at figures ranging

from £170 to £600 whilst a very pleasing 17th century doughnut powder flask realised £620.

There were a number of pistols and a pair of double-barrelled flintlock pistols by Durs Egg sold for £1350 a price which would have been well exceeded had they not been converted to percussion. Shooters of the 1820s and 30s were well aware of the virtues of the percussion system when it was developed and sensibly had their weapons converted to the newer system. Collectors of today regret their decision and a converted firearm will almost invariably realise less than its equivalent unconverted flintlock. The price difference is such that it is often worthwhile for the percussion system to be re-converted back to flint. In the hands of a skilled restorer it is often difficult to spot their alteration.

Both Bonhams and Christies featured some modern firearms in their sales and Luger self-loading pistols hold and increase their values. The long barrelled Artillery model is always a favourite and Bonhams sold

two. One complete with holster, shoulder board and other accessories made £1000 and the other a little less complete realised £700. Their sale also included a number of vintage or veteran air pistols and this is an area of the market that constantly creeps up in value. The items require no licence or other restriction and many are selling at prices well below a hundred pounds.

On the 29th March Spinks in association with Christies held a very attractive sale of medals and militaria with over one thousand lots in all. As always the medals sold well. The highest figure achieved was £8000 and several lots reached this price including a group belonging to Lt Col J. Plunkett who was one of the most decorated soldiers of the First World War. The highest price in the militaria section was £3100 for a particularly extensive and complete set of Volunteer's uniforms, belonging to an officer of the 2nd South Middlesex Volunteer Rifle Corps.

Frederick Wilkinson

Coming in next month's magazine:

Irish Warlords

English Civil War Firelocks

Culloden Feature Film

Arnhem Book Feature

World War One Miners

Reconstructing a Medieval Trebuchet
and more

